THE PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED CHILDREN:

Do They Prosper in Regular Toronto Elementary Schools?

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September, 1982

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ABSTRACT

This study is about physically handicapped and health impaired children attending regular Toronto elementary schools in either regular classes or special education classes which are (1) housed in the regular schools and (2) not self-contained classes primarily established for children with special health, orthopedic or communication needs.

The purpose of the study was to determine whether the children prosper in the regular schools with respect to their academic, social, emotional, medical and physical needs.

The information was collected by testing and interviewing the children and by interviewing their parents, teachers and principals. Control children were also tested and the teachers completed rating scales about the children and their controls.

There were approximately 300 physically handicapped and health impaired children attending regular Toronto elementary schools at the time of the study; more were health impaired than physically handicapped. They had a wide variety of conditions, the most common being asthma, neuroconvulsive disorders, cardiac (and related disorders), diabetes and cerebral palsy. Very few were classified as severely handicapped but close to 30% were neurologically

impaired.

Of the 300 children in the system, a highly representative sample of 88 became actively involved in the research activities.

Some major findings of the study are:

- Teachers, principals and parents generally support the concept of integration but caution that it should be well-planned.
- Knowledge, information and communication are essential to successful integration. In-service and written materials would be welcomed by many. Discussions with parents, doctors and nurses and information from the school health records are also seen as important by school staff.
- The self-concepts of the physically handicapped and health impaired (PH/HI) children are comparable to those of their non-handicapped peers.
- Other students could be more accepting of the PH/HI children; more cognitive and affective preparation of the other students should be considered.
- Some PH/HI children need psychological counselling because they have emotional and/or behavior problems.
- At least 40% of the PH/HI students need remedial academic help particularly in the area of mathematics. There is some confusion in the system about who should provide such help.
- About 30% of the PH/HI children could benefit from more attention in physical education. Special, individualized help and/or programs and better information and communication are strongly favored.
- If more integration were to take place, school buildings and facilities would need to be altered and special services would need to be provided.

- Coordinators and consultants with skills in a variety of areas are necessary for successful integration. The Toronto system has many such persons but their roles are not well known or understood by teachers.

- Many PH/HI children need individualization and/or special education classes because of learning disorders or behavior problems. The Toronto Board has many such programs available.

- The neurologically impaired students are more likely to have social, emotional, behavior and academic problems than those not neurologically impaired.

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(Continued)

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INTRODUCTION

There is an increasing number of physically handicapped and health impaired children attending classes in regular schools. A combination of several variables is contributing to this phenomenon. One factor is the reduction of architectural barriers. Multilevel schools may be equipped with elevators and ramps and washroom adaptations are generally included in all new schools. Another factor is the changing nature of the population of children served. Because of the advances in medicine more children survive various conditions and live longer than they did thirty years ago and, with the rapid advances in technology and the increasing availability of rehabilitation or habilitation engineering services, many more children are able to move about independently and care for themselves. Children are fitted with artificial limbs, can travel in motorized wheelchairs and are taught self-care techniques at earlier ages. A third factor is the gradual changing of society's attitudes towards handicapped children. That is, there is an increasing tendency for society to believe that however severely handicapped a child is, that child has a right to be accommodated in regular schools rather than in separate institutions. Society is also beginning to recognize that there is no hard and fast line that separates the handicapped from the non-handicapped. Physical disabilities range from mild to severe and are associated with cognitive functioning levels which range from profoundly retarded to gifted. And finally, the handicapped children and their parents are becoming more outspoken and are making more demands. This was well illustrated in a research study about physically handicapped children (Anderson, 1973) which indicated that most parents favor ordinary school placement for their children.

The integration of handicapped children which is characterized and implemented in a number of different ways is receiving considerable attention in Britain, Scandinavia and North America. In Britain, the Committee of Enquiry into the Education of Handicapped Children and Young People (the Warnock Committee) was set up by the Department of Education and Science in 1974 to:

> review educational provision in England, Scotland and Wales for children and young people handicapped by disabilities of body or mind, taking account of the medical aspects of their needs, together with arrangements to prepare them for entry into employment; to consider the most effective use of resources for these purposes; and to make recommendations.
>
> (Warnock, 1978, p. 1)

The Warnock Committee expressed two basic aims of education regardless of whether a child is handicapped or non-handicapped: the first, to increase the child's knowledge of the world in which he lives and his associated responsibilities; the second, to make him as independent and self-sufficient as possible. The concept of special education was broadened to include any child with a special educational need irrespective of its duration. With this, the Committee estimated that one in six children at any one time and one in five children at some time during their school career require some form of special educational provision to meet their needs. The Committee also felt that under the existing system children were being categorized according to their disability rather than perceived in terms of educational need. Consequently, a recommendation that would abolish statutory categorization of handicapped pupils was put forward. The Committee felt that this would assure appropriate provision in terms of educational need regardless of the form and complexity of the handicap.

The most significant trends in the education of handicapped children in Sweden are, in the words of the National Board of Education (1967), "integration, adaptation, individualization and flexibility." The Board states that its aim is to present a flexible system of possibilities where parents and children can choose between alternatives, and where every effort is made to find out what is best for the individual child. For children who cannot be educated in the ordinary schools, "special schools" still exist but their numbers are being rapidly reduced, especially in the case of physically handicapped children since an increasing number of such pupils are being integrated into ordinary classes.

Both Norway and Denmark have increasingly emphasized integration of handicapped children into the general education system. Denmark's inspector for special education has stated that "the most important factor in special education is that it should interfere as little as possible with the pupil's normal schooling" (Jorgensen, 1970).

In United States, during 1975, the Education for All Handicapped Children Act became Public Law 94-142 and reflected a major new commitment by the federal government to help educate all handicapped children. The measure requires each state to establish procedural safeguards that assure:

> ...to the maximum extent appropriate, handicapped children will be educated with children who are not handicapped, and that special classes, separate schooling, or other removal of handicapped from the regular educational environment occurs when the nature or severity of the handicap is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.
>
> (United States Public Law 94-142, 1975, p. 9)

Procedures and materials for evaluating handicaps were given considerable weighting in the United States Act.

Further clarification indicated that non-discriminating evaluation should be made by a multidisciplinary team responsible for assessing the child in all areas related to the suspected disability -- health; social, emotional and physical functioning; general intelligence; communication ability and academic performance (U.S. Office of Education, 1977, p. 42496).

As a result of Public Law 94-142, an individualized education program (IEP) must be developed for each handicapped child in consultation with the parents, any parent believing a child is not being properly served will be entitled to a hearing officer. An individualized educational program is a written statement developed by a meeting of the local educational agency which includes teachers, parents and handicapped children, and others. The statement includes such items as present level of performance, annual goals, educational services needed, initiation and completion date and evaluation procedures.

In 1964, a meeting of Canadian professionals from several disciplines who were interested in children's emotional and learning difficulties was held in Montreal. The Montreal meeting prompted the 1966 formation of the Commission on Emotional and Learning Disorders in Children which resulted in the CELDIC Report: One Million Children. The Committee accepted as a basic premise "the right of every child to the assistance that he requires to realize his full potential" (Lazure, 1970, p. 2). The CELDIC Report commenced its recommendations by stating that educational authorities must be financially responsible for the education of all children in their community and the Commission generally supported similar provisions for exceptional and non-exceptional children.

In Ontario, The Education Amendment Act, 1980 commonly known as Bill 82 is an Act to amend The Education Act, 1974. The Education Act, 1974 contained only permissive legislation for special education. A school board could, if it wished, provide special education programs and special education services for its exceptional pupils. Although most Ontario boards provided some programs, Bill 82 removes the optional status of special education and makes it the definite responsibility of all school boards to provide special education programs for students. Bill 82 ensures (1) universal access of all Ontario school age pupils to a publicly supported education, regardless of the pupil's special needs; (2) the provision of special education programs and special education services that meet the needs of exceptional pupils; (3) involvement and participation of the parents or guardians of exceptional pupils in the assessment, identification and placement of such pupils, including the right to withhold permission for particular placement and the right to require a review of the pupil's placement at any time.

Universal access means that (1) Bill 82 provides that every child of school age must be enrolled in school upon presentation by the parent or guardian; (2) effective September 1, 1985, public and separate school boards will be required to provide for the education of their trainable retarded pupils; (3) effective September 1, 1985, the existence of an exceptionality no longer will be a justifiable reason for not receiving instruction from a school board. It is possible that, in a small number of cases, it could be found that a particular child is a "hard to serve pupil" who cannot profit from instruction. In these cases the school board shall assist the parent or guardian to locate a placement suited to the needs of the pupil and reimburse the parent or guardian for any expenses incurred by the parent or guardian in locating such placement. An appeal mechanism is available where the parent or guardian disagrees.

In Bill 82, an "exceptional pupil" means a pupil whose behavioral, communicational, intellectual (including the intellectually gifted), physical or multiple exceptionalities are such that he or she is considered by a board committee to need placement in a special education program. A "special education program" means an educational program that is based on and modified by the results of continuous assessment and evaluation and that includes a plan containing specific objectives and an outline of educational services that meets the needs of the exceptional pupil. "Special education services" means facilities and resources, including support personnel and equipment, necessary for developing and implementing a special education program.

At present, "special education" in the Toronto Board of Education is a wide variety of teaching programs designed for exceptional children. The programs comprise special schools, self-contained classes, learning/resource centres, and individual or group instruction on a withdrawal or itinerant basis. All programs are open-ended and each child's progress is re-evaluated at least once a year to assure that the program is meeting his/her needs. In special education programs, instruction is individualized for the particular needs of each child. The pupil works at his/her own level and pace. Academic work is challenging but within the child's capabilities. The special education staff believes in integration of children into regular programs wherever feasible. Integration is usually a gradual process as the child becomes more independent of the special situation and learns to cope successfully in the larger environment of the regular classroom.

The Toronto Board of Education makes every effort to integrate the physically handicapped children into local schools which can accommodate their needs. For those students who require special facilities and support help, there are both elementary and secondary school programs available at several locations which serve the Metropolitan Toronto and adjoining area (Mississauga and York County). In Toronto, Sunny View and Bloorview serve elementary school students, West Park, West Toronto, Lakeview and Monarch Park serve secondary students and Lyndhurst Hospital serves secondary students. There are also Sir William Osler Vocational School in Scarborough and Langstaff School in York County.

Health impaired students are usually in the local schools except for a small group who have been recommended for Special Program (Health) by the Department of Public Health. There are six self-contained Health classes and two resource programs for these students at the elementary level.

A review of the research studies dealing with the integration of handicapped children is provided in Appendix A.

Purposes of the Study

Every child should be receiving the most appropriate education regardless of learning style, cultural background or special needs and no child should be denied the educational program which will meet learning, emotional and social needs. Present trends and legislative changes in Ontario are requiring local school boards to provide an appropriate program for every child in their jurisdictions irrespective of that child's special needs.

This study focusses on the physically handicapped and health impaired children of elementary school age, some of whom have been in special education programs because of health or physical problems and are now in regular classes and some of whom have always attended regular classes. The results of the study should be of interest to both educators and politicians from the Boards of Education in Metropolitan Toronto and from many other Boards of Education throughout Ontario and Canada.

The general, overall purpose of this study was to determine whether or not physically handicapped and health impaired children prosper in regular Toronto elementary schools and, further to this, to determine the reasons they prosper or not. Physically handicapped students were those with orthopedic or neurological conditions such as cerebral palsy, spina bifida, muscular distrophy and neuroconvulsive disorders while health impaired students were those with chronic illnesses such as asthma, cardiac conditions, blood disorders and developmental delays. Children whose primary handicap was vision or auditory were excluded. More specifically, answers were sought for the following sets of questions:

(1) How many physically handicapped and health impaired children are attending regular Toronto elementary schools from junior kindergarten through grade eight?

(2) What are the characteristics of those physically handicapped and health impaired children? What types of handicaps do they have? What is the severity of those handicaps? Do the children also have neurological impairments?

(3) What is the process by which the physically handicapped and health impaired children came to be placed in regular Toronto elementary

schools? What are the feelings of the children's parents and teachers about the process and the placement?

(4) Do physically handicapped and health impaired children prosper academically in regular Toronto elementary schools? How do their academic attainments (particularly in the basics of reading and mathematics) compare with those of their non-handicapped peers? Do children with physical handicaps of different severities (mild, medium, severe) differ in their academic attainments? Do children with neurological impairments differ in their academic attainments from those without neurological impairments? How do the parents and teachers feel about the children's academic attainments? If the children are not prospering as well academically as their non-handicapped peers, what, according to the parents and teachers, are the reasons and what could be done to improve the situation? If they are prospering as well, how, according to the teachers and parents, is it achieved?

(5) Do physically handicapped and health impaired children prosper socially and emotionally in regular Toronto elementary schools as compared with their non-handicapped peers? Do children with physical handicaps of different severities (mild, medium, severe) differ socially and emotionally? Do children with neurological impairments differ socially and emotionally from those without neurological impairments? How do their self-concepts compare? Is the extent of their emotional and behaviour disorders different? Do they have a different number of friends? Do they participate in a different number or a different kind of school social activities? Is there a difference in the number of children who choose to interact with them socially? How do the parents and teachers feel about the children's social and emotional adjustment? If the children are not prospering as well socially and emotionally as their non-handicapped peers, what, according to the parents and teachers, are the reasons and what could be done to improve the situation? If they are prospering as well, how, according to the teachers and parents, is it achieved?

(6) Are the physically handicapped and health impaired children's medical and physical needs being met in regular

Toronto elementary schools? Are the schools convenient and are all the resources (libraries, science rooms, etc.) of the schools accessible to the children? What alterations, if any, need to be made? Do the children have a physical education program? Are the children able to make use of the gymnasium and playground and, if not, what alterations need to be made? Does staffing allow for physical care requirements (medications, toileting, etc.)? Do the children have to depend on other pupils for help (mobility, etc.)? Do the children receive adequate specialized service or treatment (physiotherapy, speech therapy, crisis intervention, medical care, etc.?) Are the transportation arrangements to and from school adequate and, if not, what could be improved?

(7) Do physically handicapped and health impaired children have any effects on the other children in regular Toronto elementary schools? How do the other children react to them? Do the other children tease, bully, ignore, boss, namecall, imitate, resent, display curiosity about, ask questions about, stare at, reject, or fear the handicapped children? Does exposure to the handicapped children help the regular children become more understanding and tolerant of human differences? Is the amount of time spent on regular children in the classroom diminished because of the special needs of the handicapped children (discipline problems, special academic assignments, etc.)? Are the regular children affectively prepared for the integration of the handicapped children?

(8) How do teachers feel about having physically handicapped and health impaired children in their classrooms? Do they have enough time to plan the best programs for the children? Are they periodicall able to review the children's programs? Have they been provided with enough information about the children? Do they feel competent to deal with the children's problems? Are there adequate consultants and specialized personnel with training in the children's exceptionalities available to help the teachers? Have they been able to evaluate the children's abilities as well as their handicaps? If individualized instruction is desirable, are they willing and capable of providing such? Do they feel that they were psychologically prepared to teach the children? What special difficulties, if any, do the handicapped children present to the teachers?

Do they feel competent to diagnose and assess the children?

(9) How do principals feel about having physically handicapped and health impaired children in their schools? Do they feel competent to choose the appropriate strategies for integrating the handicapped children? Do they feel competent to help choose and implement the most appropriate programs for the children? Do they feel competent to provide the children with a safe and comfortable environment? Do they feel competent to deal with emergency situations such as fire? Do they feel they have enough information about the children? Do they feel competent to deal with the children's problems? Do they feel psychologically capable of dealing with the children? What special difficulties, if any, do the handicapped children present to the principals.

(10) How do the parents feel about having their physically handicapped and health impaired children in regular Toronto elementary schools? Do parents feel they have enough say in planning and reviewing the children's programs? Do they feel free to challenge decisions made about their children? What do they think of the diagnostic and assessment procedures? Do they feel that there are adequate consultants and specialized personnel with training in the children's exceptionalities to help the teachers? Do they feel there is enough support from doctors, psychologists, therapists, etc.? Do they feel their children get enough individual attention? Do they feel that the school personnel are cognitively, professionally and psychologically prepared and competent to deal with the children's problems? Are they satisfied with the evaluation and reporting procedures? What are the benefits of the children being in a regular school? What are the drawbacks? Do they consider the school personnel supportive? Have they been encouraged to visit the school?

(11) How do the physically handicapped and health impaired children themselves feel about being in regular schools? Are they satisfied with their academic attainments and social life? If they are not satisfied, what do they think is the problem? If they are doing well, to what do they attribute their success? Are their physical and medical needs being met? (These questions are

outlined in (6).)

(12) Are long-term plans being made for the physically handicapped and health impaired children's secondary and post-secondary education? Are long-term vocational plans being made? Does special provision need to be made for later schooling or for vocational training?

Definition of Integration

This study is about physically handicapped and health impaired children attending regular Toronto elementary schools. (Children whose primary handicap was visual or auditory were not included.)

Since, as indicated previously, the "integration" of handicapped or exceptional children is characterized and implemented in many different ways in various countries and school systems and since the Toronto Board of Education has a Special Education Department which comprises a wide variety of programs (see Appendix B for Toronto Board of Education Fact Sheet No. 6), the concept of "integration" as it pertains to physically handicapped and health impaired children in the Toronto elementary schools needed to be carefully defined for the purposes of this study.

Physically handicapped and health impaired children (hereafter referred to as PH/HI children) were considered to be "integrated" in Toronto elementary schools if they were enrolled in regular classes or if they were enrolled in special education classes which were (1) housed in the regular schools and (2) not self-contained classes primarily established for children with special health, orthopedic or communication needs (see Appendix B for Toronto Board of Education Fact Sheets Nos. 6, 16 & 22). Consequently, PH/HI children enrolled in the special education programs designated Special Program (Hospital and Institutional), Special Program (Vision), Special Program (Deaf), Special Program (Health), Special Program (Hearing), Special Program (Language) and Special Program (Orthopedic) were classified as "segregated" and not included in this study whereas PH/HI children enrolled in the self-contained and withdrawal special education programs designated Special Program (Behavioral), Special Program (Gifted and Enrichment), Special Program (Learning Centre), Special Program (Perceptual), Special Program (Primary, Junior and Senior), Special Program (Reading) and Special Program (Speech) were classified as "integrated" and considered eligible for participation in the study. (See Fact Sheet No. 6 in Appendix B for programs with Metro-wide attendance.)

The Department of Public Health

The Department of Public Health provides school health services in the public, separate and secondary schools in the City of Toronto, the purposes of which are to maintain and improve the health of school children through the establishment of healthful attitudes and habits, the recognition and follow-up of health problems, the correction of defects and the control of communicable disease. The overall policies in regard to the health program are established by the administrative groups of the Toronto Department of Public Health, the Toronto Board of Education and the Metropolitan Separate School Board.

A health service room is provided in each school by the Toronto Board of Education or the Metropolitan Separate School Board and is used by the various personnel giving the health services.

The basis of the school health program is a health assessment of each pupil by a nurse when the child enters the Toronto school system and a health (physical) examination by the family physician before the pupil enters elementary school and again before he or she enters grade nine. Health counselling for the individual pupil is determined from these assessments, from various screening tests or health surveys conducted at school and from referrals by parents, teachers, pupils, physicians, nurses or other health and social agencies in the community.

The school health services are provided by nurses, nursing assistants, physicians, dentists, dental hygienists, an audiologist and a nutrition consultant.

School Nursing Service

The nursing service in schools is part of a generalized public health nursing program in the City of Toronto.

The nurse's assignment to the school is planned by the district supervisor in consultation with the school principal. The amount of nursing time given to each school is based on population and needs of the school. In most Toronto schools the nurse visits three half days a week. She:

(1) Arranges for a basic health examination of children entering school for the first time (beginners) and begins a school health record.

(2) Reviews all incoming school health records (transfers-in) or begins a new record.

(3) Conducts teacher-nurse conferences annually.

(4) Gives professional nursing judgment and care in cases of accident or illness referred to her while she is in the school.

(5) Does any necessary follow-up of accidents or illness occurring in her absence.

(6) Is health educator and counsellor to pupils and parents, maintaining an intensive follow-up regarding any child with a health problem.

(7) Is a consultant-advisor-resource person to the school staff on matters of health, prevention of illness and accidents, disease entities, and the sociology of the family and may suggest health projects and assist in the planning and carrying out of such projects.

(8) Helps teachers feel secure in their role of health observer so that she gets suitable referrals. Offers the teachers assistance with or reference material for health

curriculum. Plans her activities so that health service can go hand in hand with health teaching. With parental consent, gives pertinent information from home visits and from medical reports to appropriate school personnel.

(9) Attends teachers' meetings to outline her own function, to gain co-operation for a health project or to interpret appraisal findings, health needs, community facilities, etc.

(10) Attends group conferences with other school personnel and outside workers to discuss a particular child's needs or the needs of a group of children.

(11) Co-operates with other Health Department personnel visiting the school to carry out surveys or to give service.

(12) Instigates continuity of care for the child through home visits.

(13) Is alert to the environmental conditions (toilets, lunchrooms, labs, workshops, etc). Makes recommendations for health safety measures.

(14) Does not give medication to school children because she is not in the schools on a regular basis.

(15) Does not provide medical treatment to school children because she is not in the schools on a regular basis.

School Medical Service

A physician employed by the Department of Public Health visits each school for half a day about once a month. The nurse selects children to be seen by the physician and confers with the physician regarding various health problems of children in the school. Further consultant service is provided by specialists in the fields of cardiology, communicable disease, ophthalmology, orthopedics, otology and sports medicine.

School Dental Service

Dental hygienists employed by the Department of Public Health carry out an education and dental inspection program annually in every elementary school. Parents are notified of any defects which are found. Treatment service is available without charge at dental clinics established in certain public and separate schools.

School Immunization Service

Parents are expected to give the nurse information about the immunization status of their child. To ensure protection, parents are notified when the child needs further immunization. Immunization teams visit each elementary school annually to review records and, with parental consent, administer any needed immunization.

Special School Screening Tests and Surveys

Audiometric Screening Tests. These tests are conducted by nurse-technicians under the direction of the Department of Public Health Hearing Conservation Centre personnel. This Centre is located in the Metropolitan Toronto School for the Deaf. All children in certain grades are tested annually; individual children may be referred by the nurse or the teacher. Parents are notified of any failures and follow-up measures are recommended.

Scoliosis Screening Examinations. Grade seven students are examined by the school nurses with parental consent for removal of clothing. Parents are notified and the child is referred to their own physician if a problem is suspected.

Vision Acuity Screening Tests. All children in certain grades are given a visual acuity test annually by the nursing assistant and/or the school nurse. Individual children are tested at any time on request of teacher or parent. When a child fails the vision test, the parent is notified and requested to take the child for an eye examination.

Color Vision Screening Tests. These tests, conducted by a technician, are given annually to all grade six children and to children in higher grades referred by the school nurse because they missed the grade six test. If a defect is found, the parent is notified. The school principal is requested to record the findings in the O.S.R.'s because a defect may influence career selection, etc.

School Nutrition Service

A nutrition consultant service is available to assist nurses in initiating and carrying out nutrition education projects in schools.

The nutrition consultant in co-operation with the Toronto Board of Education plans and directs the food services in health classes.

School Health Records

The school nurses are expected to keep an up-to-date school health record on every child. These records are kept in locked files in the nurses' offices at the schools. Parents are asked to sign release forms which allow the nurses to share the information from these records with principals and teachers involved with the children; a few parents do not sign meaning that information on the school health records for their children is not available to school authorities.

The school nurses give the school principals the names of all children who have important health concerns. The concern is described, unless there is no authorization from the parent to do so.

IDENTIFICATION, DESCRIPTION AND CATEGORIZATION OF STUDENTS

The physically handicapped and health impaired students were identified, described and categorized in co-operation with the Department of Public Health.

Identification

The School Health Consultant of the Department of Public Health requested the school nurses to pull from their files the health records of all Toronto Board of Education elementary school children whose names were on the Important Health Concerns Lists. The records of 545 children were drawn. Of these, 58 records could not be examined for this study since the parents had not given permission for the health information to be shared and 250 children were judged not to be eligible because their problems were too minor or not adequately described in the records. That left a total of 237 PH/HI children from across the system who were described and categorized - 56.5% were boys.

The 237 children were fairly evenly distributed across the elementary grade levels and special education classes (Table 1) and were located in the four administrative areas of the Toronto Board of Education in statistically the same proportions as the total population of students (Table 2).

TABLE 1

DISTRIBUTION OF PH/HI STUDENTS BY GRADE LEVEL

Grade Level	Number of Students	Percentage of Students
Kindergarten (Junior & Senior)	31	13.0%
Grade 1	19	8.0%
Grade 2	29	12.2%
Grade 3	11	4.6%
Grade 4	27	11.4%
Grade 5	23	9.7%
Grade 6	20	8.4%
Grade 7	22	9.3%
Grade 8	28	11.8%
Special Education classes	26	11.0%
ESL (English as a Second Language) classes	1	0.4%
TOTAL	237	100%

TABLE 2

DISTRIBUTION OF PH/HI STUDENTS BY ADMINISTRATIVE AREA*

Area	Number of Students in Area**	Percentage of Students in Area	Number of PH/HI Students in Area	Percentage of PH/HI Students in Area***
East	17,329	37.5%	106	44.7%
North	12,429	26.9%	60	25.3%
West	9,666	20.9%	44	18.6%
Central	6,822	14.7%	27	11.4%
TOTAL	46,246	100%	237	100%

* A map of the Board of Education for the City of Toronto administrative areas is shown in Appendix C.

** These figures include Special Education students.

*** A χ^2 one-sample test with df = 3 and a level of significance of .05 showed that the distribution of PH/HI students across the four areas was not significantly different from that of all the students in Toronto public elementary schools.

Description

Following identification, the Co-ordinator of Special Program (Physically Handicapped) of the Toronto Board of Education and the School Health Consultant of the Department of Public Health examined the 237 school health records in order to describe and categorize the PH/HI children.

First, the primary physical handicap or health impairment (the reader will recall that children whose primary impairment was hearing or vision were not included in the study) was recorded for each child. As Table 3 indicates, the 237 children had a wide variety of health problems of which asthma, neuroconvulsive disorders, cardiac (and related disorders), diabetes and cerebral palsy were each recorded for over 5% of the children. Secondary and tertiary health problems were also recorded for each child. As Table 3 shows, 24% of the children had a secondary physical handicap or health impairment and another 8% had three problems; allergies/eczema, vision impairments, asthma and cardiac (and related disorders) were most common. (Vision and hearing impairments were recorded when they appeared as secondary and tertiary ailments.)

Secondly, the health records were examined in more detail for the purpose of assessing the severity of the children's functional disabililties in the seven areas of physical capacity, upper limbs, lower limbs, toilet, speech, hearing and vision. The system of assessment which was used

TABLE 3

PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS
(N=237)

Physical Handicap or Health Impairment	PRIMARY		SECONDARY		TERTIARY		TOTAL	
	Number of Students	Percentage of Students	Number of Students	Percentage of Students	Number of Students	Percentage of Students	Number of Students	Percentage of Students
Asthma	39	16.5%	8	3.4%			47	19.9%
Neuroconvulsive disorders	35	14.8%	4	1.7%	1	0.4%	40	16.9%
Cardiac & related disorders	29	12.2%	7	3.0%			36	15.2%
Diabetes	26	11.0%					26	11.0%
Cerebral palsy	15	6.3%	1	0.4%			16	6.7%
Sickle cell anemia	10	4.2%	1	0.4%			11	4.6%
Nephritis & other kidney/ bladder failures	10	4.2%	1	0.4%			11	4.6%
Hemophilia	8	3.4%					8	3.4%
Spina bifida	6	2.5%					6	2.5%
Thalassemia major	6	2.5%					6	2.5%
Leukemia	5	2.1%					5	2.1%
Cystic fibrosis	4	1.7%					4	1.7%
Rheumatisms	2	0.8%					2	0.8%
Hemiplegia/triplegia	2	0.8%					2	0.8%
Neuropathy/cerebral ataxia	2	0.8%					2	0.8%
Migraine headache	2	0.8%					2	0.8%
Genetic abnormality	2	0.8%					2	0.8%
Hyperthyroidism	2	0.8%					2	0.8%
Polio	2	0.8%					2	0.8%
Scoliosis	2	0.8%	1	0.4%	1	0.4%	4	1.7%
Prothesis	2	0.8%					2	0.8%
Allergies/eczema	1	0.4%	13	5.5%	5	2.1%	19	8.0%
Congenital skeletal deformity	1	0.4%					1	0.4%
Thalassemia minor	1	0.4%					1	0.4%
Muscular dystrophy	1	0.4%					1	0.4%
Dwarfism	1	0.4%					1	0.4%
Missing limb	1	0.4%			1	0.4%	2	0.8%
Multiple congenital defects	1	0.4%					1	0.4%

(continued)

TABLE 3 (Cont'd)

PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS
(N=237)

Physical Handicap or Health Impairment	PRIMARY		SECONDARY		TERTIARY		TOTAL	
	Number of Students	Percentage of Students	Number of Students	Percentage of Students	Number of Students	Percentage of Students	Number of Students	Percentage of Students
Ataxia telangiectasia	1	0.4%					1	0.4%
Prune belly syndrome	1	0.4%					1	0.4%
Hydrocephalus (shunt)	1	0.4%	1	0.4%			2	0.8%
Cerebral dysrythmia	1	0.4%					1	0.4%
Malignancy	1	0.4%					1	0.4%
Erb's palsy	1	0.4%					1	0.4%
Aciduria argeus succum	1	0.4%					1	0.4%
Spinal muscular atrophy	1	0.4%					1	0.4%
Tuberculosis of spine	1	0.4%					1	0.4%
Frequent nose bleeds	1	0.4%					1	0.4%
Osteogenesis imperfecta	1	0.4%					1	0.4%
Stomach ulcers	1	0.4%					1	0.4%
Marfans syndrome	1	0.4%					1	0.4%
Calcaneous feet	1	0.4%					1	0.4%
Legge perthes	1	0.4%					1	0.4%
Prader Willi syndrome	1	0.4%					1	0.4%
Speech defect			2	0.8%	3	1.3%	5	2.1%
Hearing impairment			2	0.8%	4	1.7%	6	2.5%
Vision impairment			12	5.1%	1	0.4%	13	5.5%
Enlarged liver			1	0.4%			1	0.4%
General weakness			1	0.4%			1	0.4%
Overweight			1	0.4%			1	0.4%
Anemia			1	0.4%			1	0.4%
Digital paralysis			1	0.4%			1	0.4%
Frequent colds					1	0.4%	1	0.4%
Microcephalous					1	0.4%	1	0.4%
Enzyme deficiency					1	0.4%	1	0.4%
Chronic tonsillitis					1	0.4%	1	0.4%
Other	3	1.7%					3	1.3%
TOTAL	237	100%	58	24.0%	20	8.0%		

was a modified form of that used by Anderson (1973) which was in turn a modified form of the Pultibec system proposed by Lindon (1963). The Anderson and Lindon systems also included assessments of the children's intelligence and behavior.

The following are the criteria which were used in evaluating the children's functional disabilities on a four-point scale:

Physical Capacity (Health)

#1. Physical capacity, general health, stature, body build, exercise tolerance and endurance, good average to exceptional. Capable of a full day's work. (No person with an overt defect can be placed in this grade.) (Note that children with functional difficulties but without any overt defect should be recorded under the appropriate quality only. Physical capacity in these instances would remain grade 1.)

#2. Physical capacity etc. low to average but within normal limits. If any one or more of these factors are affected or any defect such as scoliosis is present, even if they do not affect general health, the person should not be graded higher than 2.

#3. Physical capacity less than in 2 but nevertheless capable of a full day's work if the environment is suitable. (Open employment likely.)

#4. Physical capacity etc. reduced to an extent of rendering the person incapable of a full day's normal work or travelling without special facilities. (Probably sheltered employment.)

Upper Limbs

#1. Normal

#2. Slight loss of intricate skill due to loss of co-ordination but power and range normal for manual work - able to feed and wash.

#3. Range and/or power limited as well as skill - not able to feed but can grasp objects.

#4. Severe loss. Useless for all practical purposes (includes amputations).

Locomotion/Lower Limbs

#1. Able to use limb/limbs in a completely normal way.

#2. Slight difficulty - able to run and walk but with less than usual dexterity and speed. May have some difficulty with stairs and crowds. Distance usually travelled in everyday life is not a problem.

#3. Moderate difficulty. Able to walk only short to moderate distances (i.e. approximately 20-200 yards) without a rest at a slow pace and if necessary with aids. Tendency to fall rather easily. Running impractical but possible with one good limb. Stairs take time - some help may be needed.

#4. May be able, with close supervision, to walk a few steps and to stand when holding on or supported. Stairs and gradients virtually impossible. Suitable building and transport necessary. Wheelchair needed when help not available, or all the time.

Toilet

#1. Normal

#2. Nocturnal enuresis - no special arrangement for day care.

#3. Continent for practical purposes

with, if necessary, aid of a urinary bag or catheter for bladder control or special training for bowel control. Special arrangements of width and space of toilet arrangements or hand rails etc. render child independent of further assistance. Able to attend to himself with special provisions.

#4. As in 3, with additional problems such as manipulative difficulties, necessitating help in addition to, if necessary, special arrangements as in 3.

Eyesight

#1. Normal visual acuity for near and distance vision.

#2. Refractive error corrected by glasses for near and distance vision.

#3. Strabismus, with or without suppression amblyopia - vision in used eye normal with or without glasses. Loss of binocular vision or latent squint if evaluated.

#4. Visual impairment not completely corrected though visual acuity better than 6/24 with glasses.

Hearing

#1. Normal hearing

#2. Borderline normal or variable hearing loss (eustachian catarrh). The former have slight loss of hearing for long distance conversation. Pure tone loss usually not over 60 dB except temporarily.

#3. Partially deaf - satisfactory for person in normal school. Pure tone audiograph - loss over 30 dB but under 60 dB.

#4. Partially deaf - hearing loss similar to grade 3 but within region of 60 dB and above though largely below 85 dB.

Speech

#1. Speaks well at age level.

> #2. Mildly defective and some lack of clarity and/or fluency but intelligible to strangers.
>
> #3. Definite speech defects: consistently intelligible to children and adults who know child well, but not within normal time limits to all strangers, e.g. stammer, mild articulatory dyspraxias and dysarthrias.
>
> #4. Moderate speech defect intelligible to parents and siblings but not to others within normal time limits.
>
> (Anderson, 1973, pp. 308-310)

The results of the assessments are shown in Table 4. Clearly, very few of the 237 PH/HI children integrated (as defined in the Introduction) in the Toronto public elementary school system had severe functional disabilities which could be rated as #4 major problems. The percentages in Table 4 also reveal that the children (1) were most likely to have functional disabilities in the area of physical capacity and least likely in the area of toilet; (2) were more likely to have functional disabilities associated with lower limbs than upper limbs; and (3) had more problems with eyesight than hearing.

Categorization

Once each of the seven functional disabilities had been rated, a profile was drawn up for each child using the schema shown in Figure 1. Using procedures, again modelled after those used by Anderson (1973), the functional disabilities were divided into two groups. The first group (A problems) deal mainly with physical and motor capacities and include physical capacity, upper limbs, locomotion (lower limbs) and toileting. The remaining three functional disabilities (B problems) are qualities related to communication and include speech, hearing and vision.

Using the profiles, the children were then categorized as mildly, moderately or severely handicapped or health impaired according to the following criteria:

1. Mild PH/HI children are those with no major problems in either A or B and not more than 3 minor problems in A or B.
2. Moderate PH/HI children are those with exactly one major problem in A or those with at least 4 minor problems in A and B together.
3. Severe PH/HI children are those with at least 1 level four major problem in A and at least 1 major or minor problem in B or those with at least 1 level three major problem in A and at least 2 major or minor problems in B.

The results are shown in Table 5. The majority of PH/HI children in Toronto public elementary schools are mildly handicapped or health impaired while 9% can be

PROFILE OF FUNCTIONAL DISABILITIES

	A PROBLEMS				B PROBLEMS		
	Physical capacity	Upper limbs	Lower limbs	Toilet	Speech	Hearing	Vision
1 No problem							
2 Minor problem							
3 Major problem							
4 Major problem							

Figure 1. Schema used for constructing profiles of children's functional disabilities.

TABLE 4

RATINGS OF PH/HI CHILDREN'S FUNCTIONAL DISABILITIES
(N=237)

	RATINGS (PERCENTAGE OF STUDENTS)				
Functional Disability	1 No Problem	2 Minor Problem	3 Major Problem	4 Major Problem	Not Rated
Physical capacity (Health)	0.4%	61.6%	34.2%	2.5%	1.3%
Upper limbs	89.5%	7.6%	0.8%	-	2.1%
Locomotion/lower limbs	79.3%	10.1%	6.8%	1.3%	2.5%
Toilet	94.1%	3.4%	0.8%	0.4%	1.3%
Speech	91.1%	6.3%	0.4%	0.8%	1.3%
Hearing	92.4%	4.6%	0.8%	0.4%	1.7%
Eyesight	76.4%	19.8%	1.7%	0.8%	1.3%

TABLE 5

SEVERITY OF CHILDREN'S PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS

Severity of PH/HI	Number of Students	Percentage of Students
Mild	130	55.8%
Moderate	82	35.2%
Severe	21	9.0%
TOTAL*	233	100%

* Incomplete data meant that four students could not be categorized.

classified as severe.

Finally, the children were categorized according to whether or not they were neurologically impaired. This information was also obtained from the school health records. Of 233 children, 67 (28.7%) were found to be neurologically impaired. The term "neurologically impaired" means upper central nervous system (above the brainstem) abnormalities which may be sensory handicaps or perceptual, speech and language disorders.

Table 6 shows the results of combining both categorizations of the children. The largest category of children (43.8%) were those with mild health problems and no neurological impairments; the smallest category (3.8%) were those with severe health problems and neurological impairments.

Further analysis and examination of the data (with the children classified according to their primary handicaps or impairments) yielded some other interesting findings:

TABLE 6

SEVERITY OF CHILDREN'S PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS CATEGORIZED ACCORDING TO NEUROLOGICAL IMPAIRMENT

Severity of PH/HI	PERCENTAGE OF STUDENTS (N=233)*			
	Neurologically Impaired		Not Neurologically Impaired	
Mild	11.6%		43.8%	
Moderate	13.3%	17.1%	22.3%	27.5%
Severe	3.8%		5.2%	
TOTAL	28.7%		71.3%	

* Incomplete data meant that four students could not be categorized.

(1) 92% of the children with asthma were rated as mildly or moderately disabled and were not neurologically impaired.

(2) 97% of the children with neuroconvulsive disorders were neurologically impaired.

(3) 100% of the children with cerebral palsy were neurologically impaired.

(4) 85% of the children with diabetes were rated as mildly disabled and were not neurologically impaired.

(5) 79% of the children with cardiac and related disorders were rated as mildly or moderately disabled and were not neurologically impaired.

(6) The sex of the children had no statistical relationship to whether or not they were neurologically impaired.

(7) The sex of the children had no statistical relationship to the severity of their physical handicaps or health impairments.

(8) The administrative area in which the children were located had no statistical relationship to whether or not they were neurologically impaired.

(9) The administrative area in which the children were located had no statistical relationship to the severity of their physical handicaps or health impairments.

(10) Children with neurological impairments were statistically more likely to be in special education classes (defined as integrated in this study) than those without; 21% of the children with neurological impairments were in special education classes compared with 7% of the children without neurological impairments.

(11) The type of class the children were in (special education defined as integrated versus regular) had no statistical relationship to the severity of their physical handicaps or health impairments.

DESIGN

Overall Design

Since the main purpose of the study was to determine whether PH/HI children prosper in regular schools, the study was designed to compare the PH/HI children with their non-handicapped peers (hereafter referred to as N-PH/HI children) in the regular schools rather than to compare them with PH/HI children attending special schools or classes. For each PH/HI child, two N-PH/HI children were selected from the regular schools and tested as follows:

(1) For comparisons on the academic variables, the N-PH/HI children who were selected were those children of the same sex, closest in age and in the same schools as the PH/HI children. Both groups of children were administered a nonverbal test of intellectual potential, a standardized reading achievement test and a standardized mathematics achievement test. Scores on the test of intellectual potential were used as co-variates to control for differences in intellectual potential between the two groups as their reading and mathematics scores were compared. This strategy was chosen because it seems reasonable that PH/HI children, regardless of the severity of their conditions, should be able to achieve as well academically as the N-PH/HI children given both have the same intellectual potential.

(2) For comparisons on the social and emotional variables, the N-PH/HI children were of the same sex and were randomly selected from the same classroom. For PH/HI children who were enrolled in withdrawal special education classes and thus attended regular classes as well, the N-PH/HI children were selected from those classes where the PH/HI children spent most of their time. Both groups of

> children were administered a social scale and a self-concept scale, participated in a classroom sociogram and were rated by their teachers on an emotional and social behaviour scale and an attitude scale. This strategy was chosen because children probably develop most of their social relationships and display most of their emotional characteristics within the context of the class where they spend most of their time. Thus it seemed most reasonable to compare the PH/HI children with N-PH/HI children in the same classes, noting, but not controlling for, differences in age.

As described in a preceding section, the PH/HI children were classified according to the severity of their physical conditions (mild, medium or severe) and according to whether or not they had neurological impairments. Thus, in addition to the main purpose or hypothesis of the investigation as outlined above, the classification of the PH/HI children within the context of the basic design allowed for an examination of the following secondary issues or hypotheses:

(1) Does the academic achievement of PH/HI children vary according to the severity of their physical conditions?

(2) Does the academic achievement of PH/HI children vary according to whether or not they have neurological impairments?

(3) Does the social and emotional adjustment of the PH/HI children vary according to the severity of their physical conditions?

(4) Does the social and emotional adjustment of the PH/HI children vary according to whether or not they have neurological impairments?

The study was also designed to collect a great deal of qualitative data through teacher, principal, child and parent interviews. These qualitative data were used to:

(1) support and explain the quantitative data; for example, if the quantitative data show that the PH/HI children are not achieving well in reading, do the teachers and parents agree, to what do they attribute the lack of achievement and what are their suggestions for improvement;

(2) collect answers to the many questions outlined in a previous section of this report in order to provide an in-depth, detailed picture of the position and experiences of the PH/HI children in regular Toronto elementary schools; and,

(3) describe the feelings of teachers, principals and parents as they relate to the PH/HI children - the topics have been outlined in a preceding section.

Instrumentation

Several instruments were required for the study and considerable time and energy were given to designing and/or selecting appropriate ones along with special answer sheets.

Nonverbal Test of Intellectual Capacity

Raven's Standard Progressive Matrices, Sets A, B, C, D and E was selected. This is a test of:

> A person's capacity at the time of the test to apprehend meaningless figures presented for his observation, see the relations between them, conceive the nature of the figure completing each system of relations presented, and, by so doing, develop a systematic method of reasoning.

> Everyone, whatever his age, is given exactly the same series of problems in the same order and is asked to work at his own speed, without interruption, from the beginning to the end of the scale.
>
> A person's total score provides an index of his intellectual capacity, whatever his nationality or education.
>
> It is often useful to describe the scale as a test of observation and clear thinking. By itself it is not a test of 'general intelligence' and it is always a mistake to describe it as such.
>
> (Raven, 1960, pp. 1 - 2)

Reading Test

The Comprehension Subtest of the Canadian Edition of the Gates-MacGinitie Reading Tests, Levels D and E, Form 2 was chosen.

> The Comprehension Test measures the student's ability to read complete prose passages with understanding. The passages include selections from various literary works and subject-matter fields. Some of the questions about these passages require an understanding of information that is explicitly stated in the passage; others require an understanding of information that is only implicit in the passage.
>
> (MacGinitie, 1980, p. 1)

Mathematics Test

One test from each of three levels of the 1978 Metropolitan Achievement Tests was picked for the study:

(1) Elementary Level, Form JI; Operations: Whole Numbers. This test is composed of 33 computations

using the four basic operations (addition, subtraction, multiplication, division) with whole numbers.

(2) Intermediate Level, Form JI; Operations: Whole Numbers. This test is composed of 39 computations using the four basic operations (addition, subtraction, multiplication, division) with whole numbers.

(3) Advanced 1 Level, Form JI; Operations: Fractions and Decimals. This test is composed of 45 computations using the four basic operations with fractions, decimals and percents.

Self-Concept

Dr. Stanley Coopersmith at the University of California defines self-esteem as follows:

> By self-esteem we refer to the evaluation which the individual makes and customarily maintains with regard to himself; it expresses an attitude of approval or disapproval and indicates the extent to which the individual believes himself to be capable, significant, successful and worthy. In short, self-esteem is 'a personal judgment' of worthiness that is expressed in the attitudes the individual holds toward himself.
>
> (Coopersmith, 1967, p. 5)

The investigators examined a number of self-concept inventories and selected the IOX Self Appraisal Inventory (see Appendix D). This inventory, developed by the Instructional Objectives Exchange of the University of California at Los Angeles, is composed of eighty statements; each item requires either a 'TRUE' or a 'FALSE' response. For each statement, one point is scored for the appropriate response ('TRUE' or 'FALSE') connoting a high self-concept.

Therefore, the maximum possible score on the IOX is eighty. The items on the inventory also yield subscores on four dimensions of self-concept:

(1) Family, i.e., one's self-esteem yielded from family interactions;

(2) Peer, i.e., one's self-esteem associated with peer relations;

(3) Scholastic, i.e., one's self-esteem derived from success or failure in scholastic endeavours; and

(4) General, i.e., a comprehensive estimate of how the self is esteemed.

Social Measures

Two instruments were used to collect information about the students' social interactions and activities.

The Sociogram. A description of the sociogram which includes the instructions for administration is given in Appendix E. The sociogram was given to the classes of students with which the PH/HI students spent most of their time; those were regular classes for some and special education classes for others. Two pieces of information were tallied for the PH/HI children and their N-PH/HI peers:

(1) Number of students in the clasf who selected each child; and,

(2) number of students in the class who reciprocated the choices of each child.

The Social Scale. Although it is extremely difficult to measure sociability directly, since long-term observations would be required, a second sociometric technique was employed to collect indirect evidence of the students' sociability in their schools (the information obtained from the sociogram was limited to their classrooms) The Social Scale (shown in Appendix F along with instructions for administration) was an adaptation of the Pupil Preference Instrument (Larter, 1976), an instrument which produces quantitative indices of sociability but does not measure the quality of relationships. The adapted Social Scale produced data on ten variables:

(1) Number of boys for an imaginary birthday party.
(2) Number of girls for an imaginary birthday party.
(3) Number of boys and girls for an imaginary birthday party.
(4) Number of boys for everyday activities.
(5) Number of girls for everyday activities.
(6) Number of boys and girls for everyday activities.
(7) Number of everyday activities with boys.
(8) Number of everyday activities with girls.
(9) Number of everyday activities with boys and girls.
(10) Number of activities alone.

Teachers' Ratings of Students' Emotional and Social Behavior

A new instrument was designed for the purpose of having the teachers rate the emotional and social behavior of the PH/HI students and their N-PH/HI peers. A copy of the original instrument as completed by the teachers is shown in Appendix G. The instrument consists of 75 items incorporating a wide variety of behaviors which students might display in a classroom setting (63 items) and behaviors which students might evoke from their peers in a classroom setting (12 items). Each item requires one of five responses - never, not usuallv/not frequently, sometimes, usually/frequently, or always/constantly.

The statistical refinement of the questionnaire is described in the section on data analysis.

Teachers' Ratings of Their Feelings About Students

A 26-item rating scale was devised so that teachers could describe their feelings about the PH/HI children and their N-PH/HI peers (see Appendix H). Each item requires one of five responses - strongly disagree, disagree, undecided, agree, or strongly agree.

The statistical refinement of the questionnaire is described in the section on data analysis.

Student Interview

The Student Interview Schedule is shown in Appendix I. The PH/HI children were interviewed on a face-to-face basis during school hours. The interview covered the topics of academic achievement, social adjustment, school behavior, extra-curricular activities, attendance, feelings about school, accessibililty of various school areas, convenience of various school facilities, accidents associated with school facilities and special needs.

Teacher Interview

The Teacher Interview Schedule is shown in Appendix J. The teachers of the PH/HI children were interviewed on a face-to-face basis during school hours. The interview schedule consists of two parts. Part A covered the topics of academic achievement, social and emotional adjustment, accessibility of various school areas, convenience of various school facilities, accidents associated with school facilities, knowledge about and understanding of student, special service needs of student, physical education, suitability of class placement and ability to accommodate the student, personal feelings about student, effects on other students and future plans.

Part B dealt with the matters of professional training, experience and competence related to teaching PH/HI children.

Principal Interview

The principals or vice-principals were also interviewed on a face-to-face basis during school hours (see Appendix K for the interview schedule). The interview schedule consists of two parts. Part A included the matters of previous placement, procedures, problems and changes at the time of admittance or transfer to school, transportation, types of programs/curriculum/groupings being experienced by PH/HI students, ability of school to accommodate students, problems created for administrators and problems created for other students.

Part B covered the topics of personal feelings and professional training, experience and competence as related to PH/HI children. Part B also included a question which asked the principals to suppose that several PH/HI children were to be integrated into their schools and to speculate on the changes which would have to be made.

Parent Interview

The Parent Interview Schedule shown in Appendix L was used to interview the parents/guardians in their homes. The parents were asked questions related to academic progress, social and emotional adjustment, extra-curricular activities, physical education, various school benefits and future plans. They were also asked for a detailed history and background of the students, procedures and problems associated with enrollment in school, suitability of school and programs, accessibility of school, convenience of school facilities, transportation needs, medical needs, emergency needs and other special needs. Finally, they were asked to give their opinions on the school staff, school programs, evaluation/reporting procedures, consultants and specialists.

Procedures for Data Collection

The Research Associate and the Research Assistant of the Toronto Board of Education together with six research technicians especially hired for the study spent five months - February through June of 1981 - gathering the data. The procedures proved to be complex and time-consuming and could not have been effectuated without the noteworthy co-operation of the principals, vice-principals, teachers and secretaries in the schools.

First, upon receiving the names of the PH/HI children and the names of their schools from the Co-ordinator of Special Program (Physically Handicapped) and the School Health Consultant, notices (a sample of which is shown in Appendix M) were sent to the school principals apprising them of the study and listing the names of the children who had been identified for the study. The principals were told they would be contacted within a week in order to make arrangements for data collection.

On the first visit to the schools, the technicians collected the names of the control students (more will be said of the control students in the sequel) and the dates of birth, home addresses, telephone numbers, teachers' names, and needs for translation for both the PH/HI and the control students.

Soon after, the principals were sent (via the Board mail) a sealed brown envelope to be given to each PH/HI child to be taken home to the parents or guardians. Inside each envelope was a letter to the parents which explained the purposes and methods of the study and which requested that they and their child participate. Two consent forms - one for the child's participation and one for the parent's participation - along with a stamped envelope addressed to the Research Department were also included in the brown envelope. (These items are presented in Appendix N.) The letters and consent forms were sent out in English, Italian, Greek, Chinese, Portuguese, Spanish, Serbo-Croatian, Panjabi, Vietnamese and Polish.

If the parents of the PH/HI children did not return the consent forms within ten days, a follow-up telephone call was made to the home; these calls often required the help of interpreters.

Once parents consented to having their PH/HI children participate in the study, the same procedure was repeated to obtain consent from the parents of the control students. If a parent refused to let a control student participate, the parents of the second or third choice of control student were contacted. The parents of control students were themselves not asked to take part in the study.

When all the necessary consent forms had been received, the PH/HI students and their N-PH/HI controls were tested and interviewed. The research technicians did this work in the schools sometimes on a one-to-one basis but usually in small groups. The students were released from their classrooms and the testing and interviewing were usually done in a small room or office. Since up to three hours could be required for a student to complete the battery of instruments, the testing was most often done in two or three different sittings.

One research technician was responsible for interviewing the parents in their homes in the afternoons or evenings. Interpreters were frequently needed for the

Italian, Greek, Portuguese, Chinese and Spanish families. These face-to-face interviews took, on the average, an hour to complete. If an interpreter was involved, the interview was considerably longer.

The principals/vice-principals and teachers were interviewed during school hours on a face-to-face basis.

Procedures for Data Analysis

Most of the statistical analyses were done using Version H of the Statistical Package for the Social Sciences (SPSS) (1979).

Chi-square Tests

Two types of chi-square tests were used to analyse data at various stages throughout the study. In instances where distributions of characteristics of the PH/HI students were compared to the entire population of students in the elementary schools, chi-square one-sample tests with df = k-1 (where k = # categories) were used. The null hypotheses for these tests were that the characteristics of the PH/HI students did not differ significantly from the characteristics of all the students.

In cases where data for the PH/HI children comprised paired observations on two nominal variables and a test was needed to determine whether the variables were independent of each other or associated, contingency tables were constructed and chi-square tests of independence with df =

(R-1)(C-1) were used.

For all chi-square significance tests, the significance criterion was a chance probability less than or equal to .05.

Interview Schedules

The open-ended questions were hand coded by three people after the investigators designed four code books based on twenty interviews selected at random from each of the parent, teacher, principal and student interviews. For many questions, the coders expanded the number of categories as necessitated by new response patterns encountered in later interviews.

The occupations of the students' fathers and mothers were categorized according to a simplified version of the Blishen Scale (1976 and 1978) for socio-economic status. These scales rank over 300 occupations for males and females drawn from the 1971 Canadian Census by education and income. As was done in the Grade Nine Student Survey: Fall 1980 (Wright and Dhanota, 1981), the Blishen socio-economic categories were collapsed to six categories for presentation in this report.

Frequency counts, in most cases converted to percentages and presented in tables, were used to present the results of the four sets of interviews. For many questions, the number of categories used to code the answers were collapsed, for the purposes of reporting, to only those answers which were most frequent or to categories which were broader than the original categories. In some instances, cross tabulations were used to look at the data from two or more questions in more detail.

Academic Variables

Total scores were calculated for each PH/HI student and each N-PH/HI student (control student) on the reading test, the mathematics test and the test of intellectual capacity. The reading and mathematics scores were converted to percentages.

Means and standard deviations for the three tests were then calculated for the PH/HI and N-PH/HI groups of children and for six subgroups of the PH/HI children (mild, medium and severe with neurologically impaired and non-neurologically impaired).

Comparisons between the PH/HI students and their controls.

Two-tailed t-tests were performed to test the hypotheses that the differences between the means of the three academic tests of the PH/HI and N-PH/HI children were equal to zero against the alternative hypotheses that they were different from zero.

Analyses of covariance were performed to test the hypotheses that the differences between the means of the reading test and the mathematics test while controlling for intellectual potential (covariate) of the PH/HI and N-PH/HI children were equal to zero against the alternative hypotheses that they were different from zero.

All hypotheses were tested at the .05 level of significance.

Comparisons among the subgroups of PH/HI students. The design for the comparisons was a 2 x 2 complete factorial which described two levels of neurological impairment and two levels of severity of handicap or health impairment. (Because there were so few severe cases, severe and moderate cases were combined to form one group.) Since there were four cells in the 2 x 2 design, there were four between-cell degrees of freedom. One degree of freedom was taken up in the estimation of the general mean, leaving three estimable effects. The levels of both factors in the design were fixed. One degree of freedom was used to estimate the main effect of neurological impairment, one degree of freedom used to estimate the main effect of severity and one degree of freedom used to estimate the interaction between neurological impairment and severity.

Univariate analyses of variance and covariance for unequal cell frequencies were performed to test various hypotheses related to the academic variables. The F values were examined for significance at the .05 level.

The Sociogram

The Sociogram produced data on two variables (as described under 'Instrumentation').

The strategies used to test hypotheses related to the two variables using t-tests and analyses of variance were identical to those used for the academic variables.

The Social Scale

The Social Scale produced data on ten variables (as described under 'Instrumentation').

Again, the steps used to analyse the data using t-tests and analyses of variance were identical to those used for the academic variables.

The IOX Self Appraisal Inventory

Total scores were calculated for each PH/HI student and each N-PH/HI student on each of the four subscales (20 items each) and the entire scale (80 items).

The steps used to analyse the data using t-tests and analyses of variance were identical to those used for the academic variables.

Teachers' Ratings of their Feelings about Students

The teachers rated 262 PH/HI and N-PH/HI students on the 26-item scale. (The teachers rated students whose parents did not give consent for them to participate in the testing and interviewing.)

Statistical refinement of the rating scale. For the 262 responses, intercorrelations of scores on the 26 items were calculated and the resulting correlational matrix with squared multiple correlation coefficients inserted as elements in the diagonal was subjected to principal factor analysis (with iteration) followed by varimax orthogonal rotation. The subprogram extracted (after 7 iterations) and rotated 3 principal factors with eigenvalues greater than 1.00. These 3 factors accounted for 96.1% of the total variance and 22 of the items had their highest loading on them. Items 3, 4, 17 and 26 were discarded.

Tables 7, 8 and 9 show the items, the item numbers and the item factor loadings for the 3 factors or subscales which were identified. These tables also show the percentage of total variance accounted for by each factor. The names which were given to the subscales are shown in the headings of the tables.

Subscale reliabilities. Internal consistency estimates of reliability were calculated for the three subscales on the 262 responses. They proved to be acceptable:

Subscale One - .94
Subscale Two - .82
Subscale Three- .78

Tests of hypotheses. The steps used to analyse the data using t-tests and analyses of variance were identical to those used for the academic variables.

Teachers' Ratings of Students' Emotional and Social Behavior

The teachers rated 262 PH/HI and N-PH/HI students on the 75-item scale.

Statistical refinement of the rating scale. For the 262 responses, intercorrelations of scores on the 75 items were calculated and the resulting correlation matrix with squared multiple correlation coefficients inserted as elements in the diagonal was subjected to principal factor analysis (with iteration) followed by varimax orthogonal rotation. The subprogram extracted 7 principal factors with eigenvalues greater than 1.00. These 7 factors accounted

TABLE 7

SUBSCALE ONE: AGREEABLE FEELINGS

Item Number	Item	Item Factor Loading
1	I like having this student in the classroom	.77
8	I feel comfortable with this student	.58
10	I think highly of this student	.83
14	I respect this student	.72
16	I miss this student when he/she is away	.56
19	When I see this student I feel good	.87
20	I am delighted to know this student	.88
21	This student pleases me	.83
22	I get along with this student	.70
24	I enjoy working with this student	.84

Variance Accounted For: 69.0%

TABLE 8

SUBSCALE TWO: DISQUIETIVE FEELINGS

Item Number	Item	Item Factor Loading
*5	This student makes me feel tense	.54
*9	I stare at this student	.59
*11	This student embarrasses me	.65
*12	This student upsets me	.52
*13	I am afraid to play or work with this student	.61
*18	I am careful about what I say to this student	.33
*25	I stay away from this student	.46

Variance Accounted For: 19.3%

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* Item scored with opposite polarity.

TABLE 9

SUBSCALE THREE: PROTECTIVE FEELINGS

Item Number	Item	Item Factor Loading
*2	I help this student too much	.49
*6	I feel sorry for this student	.72
*7	I protect this student	.66
*15	I worry about this student	.70
*23	This student takes up too much of my time	.45

Variance Accounted For: 7.8%

* Item scored with opposite polarity.

for 93.8% of the total variance and 74 of the items had their highest loading on them. Item 39 was discarded.

Tables 10 to 16 show the items, the item numbers and the item factor loadings for the 7 factors or subscales which were identified. These tables also show the percentage of total variance accounted for by each factor. The names which were given to the subscales are shown in the headings of the tables.

Subscale reliabilities. Internal consistency estimates of reliability were calculated for the seven subscales on the 262 responses. They proved to be acceptable:

Subscale One - .98
Subscale Two - .93
Subscale Three - .86
Subscale Four - .88
Subscale Five - .85
Subscale Six - .86
Subscale Seven - .76

TABLE 10

SUBSCALE ONE: MATURITY

Item Number	Item	Item Factor Loading
3	Steady	.38
*4	Fights with peers	.79
*5	Moody	.60
7	Good-natured	.56
*8	Hyperactive	.58
10	Calm	.57
*12	Wants too much attention	.55
13	Has concern for others	.55
16	Polite	.70
*17	Cheats	.54
*18	Teases other students	.73
*19	Bullies	.86
*20	Obstinate	.77
*21	Gets into trouble when no one is watching	.79
*22	Has temper outbursts	.80
*24	Difficult to comfort	.47
*25	Talks back to teachers	.78
*31	Hostile to teachers	.76
33	Composed	.42
35	Obedient	.74
*36	Name-calls	.77
37	Kind	.67
*42	Resented by peers	.52
*44	Displays jealousy over attention paid to other children	.57
45	Friendly to teachers	.56
*47	Bossy	.72
*48	Impulsive	.66
*50	Steals	.53
57	Self-controlled	.56
*63	Overly talkative	.50
64	Respects property	.65
65	Co-operates with peers	.68
67	Can accept criticism	.52
*69	Feared by peers	.69
*71	Imitated by peers (negatively)	.47
*72	Possessive	.53
73	Generous	.47
75	Trustful	.68

Variance Accounted For: 61.6%

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* Item scored with opposite polarity

TABLE 11

SUBSCALE TWO: FRIENDLINESS

Item Number	Item	Item Factor Loading
9	Adjusts easily to new situations	.52
11	Participates well in group activities	.65
15	Interacts easily with teachers	.58
*26	Ignored by peers	.54
*27	Spends long periods of time alone	.59
34	Sociable	.74
*38	Withdrawn	.60
54	Eager	.59
55	Knows how to have fun	.68
60	Interacts well with peers	.60
62	Cheerful	.66

Variance Accounted For: 12.7%

* Item scored with opposite polarity

TABLE 12

SUBSCALE THREE: INFERIORITY

Item Number	Item	Item Factor Loading
*2	Feelings are easily hurt	.53
*6	Fears failure	.68
23	Self-assured	.65
41	Confident	.60
*58	Tense	.58
*61	Has feelings of inferiority	.62
*74	Worries	.62

Variance Accounted For: 7.0%

* Item scored with opposite polarity

TABLE 13

SUBSCALE FOUR: PEER REJECTION

Item Number	Item	Item Factor Loading
*14	Teased by peers	.71
*32	Cries	.30
*43	Easily embarrassed by peers	.49
*46	Rejected by peers	.64
*52	Bullied by peers	.78
*59	Bossed around by peers	.66
*68	Called names by peers	.68

Variance Accounted For: 4.3%

* Item scored with opposite polarity

TABLE 14

SUBSCALE FIVE: ACCOUNTABILITY

Item Number	Item	Item Factor Loading
1	Collected	.34
28	Responsible	.53
*29	Daydreams	.39
30	Consistent	.53
40	Completes activities	.53

Variance Accounted For: 3.5%

* Item scored with opposite polarity

TABLE 15

SUBSCALE SIX: PEER CURIOSITY

Item Number	Item	Item Factor Loading
*51	Peers ask questions about student	.69
*53	Peers are curious about student	.75
*66	Stared at by peers	.70
Variance accounted for: 2.4%		

* Item scored with opposite polarity

TABLE 16

SUBSCALE SEVEN: CLINGING NATURE

Item Number	Item	Item Factor Loading
*49	Asks for too much comfort and praise	.60
*56	Clings	.59
*70	Whines	.55
Variance accounted for: 2.2%		

* Item scored with opposite polarity

Tests of hypotheses. The steps used to analyse the data using t-tests and analyses of variance were identical to those used for the academic variables.

Limitations of the Design

Statistically speaking, the results and conclusions of this study are not generalizable. That is to say, the results are only valid for the students who actually took part in the study and cannot be assumed to be valid for students whose parents did not give permission for their involvement, for students below grade three, for students above grade eight or for students not attending Toronto public elementary schools.

As will be discussed in the next section, an effort was made to include all PH/HI children in grades 3 through 8 in classes defined as integrated (the numbers were small enough to make this feasible), however parental consent could not be secured for every child and the children who did finally become part of the study could not be considered a genuine random sample. These circumstances thus preclude generalizing the results.

Notwithstanding these limitations, the report should be valuable and interesting to a fairly wide audience for the findings touch on many salient issues which should be considered by any educational system making decisions about physically handicapped and health impaired children.

SUBJECTS OF THE STUDY

Sample Students

As reported earlier, 237 physically handicapped and health impaired children were identified as eligible and available for the study. Of those identified, 155 were in grades three through eight (or special education classes at the same age level) and thus considered old enough to participate in the various activities designed for the research study.

The subset of children who finally became actively involved in some portion of the study numbered 88 (57%); the parents of the others would not agree to the research and were only considered in the teachers' interviews and for the teachers' ratings.

Data on several variables were examined to determine whether the experimental group of 88 children was representative of the entire population of 237 PH/HI children or the 155 children in grades three through eight.

For the variable sex, 63.6% were male. A chi-square test showed that this distribution by sex was statistically similar to that for all 237 PH/HI children.

Table 17 shows the distribution of the sample students by grade level (grade three and above) and special education classes compared with all the PH/HI students (N=155 in this case). A chi-square test showed that the sample distribution was not statistically different from the distribution for all the PH/HI students.

A chi-square test also showed that the distribution of the 88 sample students by administrative area (Area East - 43.2%; Area North - 27.3%; Area West - 21.6%; Area Central - 8.0%) was statistically similar to the distribution for all the 237 PH/HI students. (see Table 2).

TABLE 17

DISTRIBUTION OF SAMPLE AND ALL PH/HI STUDENTS BY GRADE LEVEL AND SPECIAL EDUCATION CLASSES

Grade Level	Percentage of Sample Students (N=88)	Percentage of all PH/HI Students (N=155)
Grade 3	6.8%	7.1%
Grade 4	13.6%	17.4%
Grade 5	12.5%	14.8%
Grade 6	9.1%	12.9%
Grade 7	15.9%	14.2%
Grade 8	18.2%	18.1%
Special Education classes	23.9%	15.5%
TOTAL	100%	100%

Table 18 gives the primary, secondary and tertiary physical handicaps and health impairments of the 88 sample students. In order to test whether their ailments were distributed in the same proportions as all the PH/HI children, the primary handicaps were grouped as shown in Table 19. A nonsignificant chi-square test (df = 6) on the data in the table indicated that the sample was representative of all the 237 PH/HI students.

Table 20 shows the ratings of the sample children's seven functional disabilities. A chi-square test was calculated for each functional disability to see if the proportions varied from all the PH/HI children (see Table 4). (In some cases, categories were collapsed to avoid small expected frequences in the chi-square tests.) Six of the chi-square tests were nonsignificant. However, in the case of "eyesight", the chi-square test was significant; more of the sample children had eyesight problems than all the 237 PH/HI children (35.2% versus 22.3%).

Finally, the proportions of the sample children in the six (collapsed to four) categories related to severity and neurological impairment are shown in Table 21. A chi-square test (df=3) determined that the proportions were not statistically different from all 237 PH/HI children. (see Table 6).

TABLE 18

PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS OF SAMPLE STUDENTS (N=88)

Physical Handicap Or Health Impairment	PRIMARY		SECONDARY		TERTIARY		TOTAL	
	Number of Students	Percentage of Students	Number of Students	Percentage of Students	Number of Students	Percentage of Students	Number of Students	Percentage of Students
Asthma	13	14.8%	2	2.3%			15	17.0%
Diabetes	12	13.6%					12	13.6%
Neuroconvulsive disorders	11	12.5%	2	2.3%	1	1.1%	14	15.9%
Cerebral palsy	10	11.4%					10	11.3%
Cardiac & related disorders	9	10.2%	1	1.1%			10	11.3%
Hemophilia	4	4.5%					4	4.5%
Sickle cell anemia	3	3.4%	1	1.1%			4	4.5%
Nephritis & other kidney/ bladder failures	2	2.3%					2	2.3%
Spina bifida	2	2.3%					2	2.3%
Cystic fibrosis	2	2.3%					2	2.3%
Neuropathy/cerebral ataxia	2	2.3%					2	2.3%
Thalassemia major	1	1.1%					1	1.1%
Leukemia	1	1.1%					1	1.1%
Rheumatisms	1	1.1%					1	1.1%
Hemiplegia/triplegia	1	1.1%					1	1.1%
Migraine headache	1	1.1%					1	1.1%
Thalassemia	1	1.1%					1	1.1%
Hydrocephalus (shunt)	1	1.1%					1	1.1%
Cerebral dysrythmia	1	1.1%					1	1.1%
Polio	1	1.1%					1	1.1%
Prader Willi syndrome	1	1.1%					1	1.1%
Aciduria argeus succum	1	1.1%					1	1.1%
Spinal muscular atrophy	1	1.1%					1	1.1%
Tuberculosis of spine	1	1.1%					1	1.1%
Prothesis	1	1.1%					1	1.1%
Stomach ulcers	1	1.1%					1	1.1%
Calcaneous feet	1	1.1%					1	1.1%
Allergies/eczema			5	5.7%	1	1.1%	6	6.8%
Vision impairment			6	6.8%			6	6.8%
Speech defect			1	1.1%	1	1.1%	2	2.3%

(continued)

TABLE 18 (Cont'd)

PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS OF SAMPLE STUDENTS (N=88)

Physical Handicap Or Health Impairment	PRIMARY		SECONDARY		TERTIARY		TOTAL	
	Number Of Students	Percentage Of Students	Number Of Students	Percentage Of Students	Number Of Students	Percentage Of Students	Number Of Students	Percentage Of Students
Digital paralysis			1	1.1%			1	1.1%
Hearing Impairment					1	1.1%	1	1.1%
Microcephalous					1	1.1%	1	1.1%
Enzyme deficiency					1	1.1%	1	1.1%
Other	2	2.3%					2	2.3%
TOTAL	88	100%	19	21.6%	6	6.8%		

TABLE 19

PRIMARY PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS OF SAMPLE STUDENTS COMPARED WITH ALL STUDENTS

Primary Physical Handicap or Health Impairment*	Percentage of Sample Students (N=88)		Percentage of all PH/HI Students (N=237)	
Asthma	14.8%		16.5%	
Diabetes	13.6%		11.0%	
Neuroconvulsive disorders	12.5%		14.8%	
Cerebral Palsy	11.4%		6.3%	
Cardiac & related disorders	10.2%		12.2%	
Hemophilia	4.5%	17.1%	3.4%	16.8%
Sickle cell anemia	3.4%		4.2%	
Nephritis & other kidney/ bladder failures	2.3%		4.2%	
Spina bifida	2.3%		2.5%	
Cystic fibrosis	2.3%		1.7%	
Neuropathy/cerebral ataxia	2.3%		0.8%	
Others	20.5%		22.4%	
TOTAL	100%		100%	

* These groupings were done only for the purpose of avoiding small expected frequencies in the chi-square test.

TABLE 20

RATINGS OF SAMPLE CHILDREN'S FUNCTIONAL DISABILITIES (N=88)

Functional Disability	RATINGS (PERCENTAGE OF STUDENTS) 1 No Problem	2 Minor Problem	3 Major Problem	4 Major Problem	Not Rated
Physical capacity (Health)	-	68.2%	28.4%	2.3%	1.1%
Upper limbs	88.6%	9.1%	1.1%	-	1.1%
Locomotion/lower limbs	75.0%	15.9%	6.8%	1.1%	1.1%
Toilet	96.6%	1.1%	-	1.1%	1.1%
Speech	89.8%	6.8%	1.1%	1.1%	1.1%
Hearing	92.0%	4.5%	-	1.1%	2.3%
Eyesight	63.6%	30.7%	3.4%	1.1%	1.1%

TABLE 21

SEVERITY OF SAMPLE CHILDREN'S PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS CATEGORIZED ACCORDING TO NEUROLOGICAL IMPAIRMENT

Severity of PH/HI	PERCENTAGE OF STUDENTS (N=88) Neurologically Impaired		Not Neurologically Impaired	
Mild	12.5%		45.5%	
Moderate	15.9%	19.3%	17.0%	22.7%
Severe	3.4%		5.7%	
TOTAL	31.8%		68.2%	

To sum up then, all 237 PH/HI children were not in the research study; some were deemed too young to participate in the research activities and others were excluded because their parents would not give their consent. The study finally involved 88 children. Chi-square tests were done on the following twelve variables:

- sex
- grade level/special education
- administrative area
- type of physical handicap/health impairment
- physical capacity problems
- upper limbs problems
- lower limbs problems
- toilet problems
- speech problems
- hearing problems
- eyesight problems
- categorization according to severity of physical problems and neurological impairment.

The results for all but one variable (eyesight problems) indicated that the sample of 88 children was highly representative of the 237 PH/HI children.

A final note should be made which is that complete test and interview data could not be collected for all 88 students. The numbers involved in the various research activities were:

Standard Progressive Matrices Test - 83
Reading Test - 83
Mathematics Test - 83
IOX Self Appraisal Inventory - 80
Sociogram - 78
Social Scale - 81
Student Interview - 82

Control Students

Two control students were chosen for each of the 88 sample students. Since parental consent was also required for the participation of the control students, extra backup controls were selected and were used in 40% of the cases. The controls were selected by the research technicians using school class lists kept in the school offices.

The controls for the academic variables were those students of the same sex within the same school who were closest in age to the PH/HI children. They were not necessarily in the same classrooms as the PH/HI children.

The controls for the social and emotional variables were randomly selected students of the same sex in the same classrooms as the PH/HI students.

Parents

The plan was to interview all the parents or guardians of the sample students. However, in 10 of the 88 cases, interviews were not granted. In most cases, the mother was interviewed alone, although 10 fathers, 1 guardian and 1 stepparent were interviewed alone and in 2 cases older sisters did interpretation.

Teachers

The teachers of the PH/HI children were interviewed and were asked to complete two rating scales about the children and their controls. An attempt was made to involve the teachers of all the 155 PH/HI children. The numbers who responded to the three activities were:

Interview - 148
Teacher Questionnaire about Students - 131
Emotional and Social Behavior Rating Scale - 131

Principals

The 155 PH/HI children were located in 65 different Toronto elementary schools. An attempt was made to interview the principals (or vice-principals) of all these schools. An interview was completed with 64 (95%) of them. It is of interest to note that there are 119 elementary schools in the Toronto Board of Education; the study thus involved 56% of the total number of schools.

FINDINGS

Academic Variables

Comparisons between the PH/HI Students and their Controls

The means and standard deviations for the three academic measures for the PH/HI students and their controls are shown in Table 22.

Three t-tests were performed to test the hypotheses

TABLE 22

MEANS AND STANDARD DEVIATIONS ON ACADEMIC VARIABLES FOR PH/HI STUDENTS AND THEIR CONTROLS

Academic Measure		PH/HI Students (N=83)	Control Students (N=83)
Standard Progressive Matrices	- mean	35.23*	39.55
	- standard deviation	12.65	10.25
Reading	- mean	53.49	59.65
	- standard deviation	27.07	20.85
Mathematics	- mean	53.29*	66.79
	- standard deviation	28.71	24.18

* The mean for the PH/HI students is significantly lower than the mean for the control students ($p \leq .05$).

that the differences between the means of the two groups were equal to zero against the alternative hypotheses that they were different from zero. The PH/HI students had significantly lower mean scores on the tests of intellectual capacity and mathematics. Their reading scores were statistically the same.

Two analyses of covariance were then done using the Standard Progressive Matrices Test as a covariate to further test the differences between the two groups. The results showed that after controlling for the differences in intellectual potential, the PH/HI students still scored significantly lower on the mathematics test and scored statistically the same on the reading test.

Comparisons among the PH/HI Students

The means and standard deviations for the PH/HI students first grouped according to severity of disability and then according to neurological impairment are given in Table 23. When grouped according to severity of disability, it is obvious that no differences exist in their mean scores on the three tests. However, when regrouped according to neurological impairment, t-tests showed that the neurologically impaired children scored significantly lower on all three tests.

Students' Opinions

The PH/HI students were asked to rate their achievement in mathematics and reading. A higher percentage of students rated themselves as doing VERY GOOD/GOOD in reading than in

TABLE 23

MEANS AND STANDARD DEVIATIONS ON THE ACADEMIC VARIABLES FOR SUBGROUPS OF THE PH/HI STUDENTS

Subgroup of PH/HI Students		Standard Progressive Matrices	Reading	Mathematics
Mildly disabled (N=46)	mean	35.96	53.39	51.30
	standard deviation	12.02	25.50	27.70
**Moderately/severely disabled (N=37)	mean	34.32	53.61	55.77
	standard deviation	13.51	29.26	30.13
Neurologically impaired (N=28)	mean	27.64*	38.54*	42.05*
	standard deviation	10.55	24.83	26.95
Not neurologically impaired (N=55)	mean	39.09	61.10	59.02
	standard deviation	11.93	25.09	28.11

* The mean for the neurologically impaired students is significantly lower than the mean for the not neurologically impaired students ($p \leq .05$).

** Because of the small number of severe cases, they were grouped with the moderate cases.

mathematics (82% versus 57%). Similarly, 71% felt they could do better in reading while a larger percentage (83%) felt they could do better in mathematics. This opinion data reinforces the results of the test data.

When the students were asked to elaborate on the ratings they had given themselves in mathematics and reading, most of their answers proved not to be particularly profound. For example, a student might say, "I rate myself VERY GOOD in mathematics because I get good marks", or "I rate myself GOOD in reading because I read a lot and have no problems". However, in the case of reading, nine children rated themselves low because they felt they had problems with pronunciation.

Those students who felt they could do better in their mathematics and/or reading tended to emphasize trying harder in various ways and extra school work or home work as the solutions. Very few of the children described the solutions in terms of different classes, better teachers or some kind of extra help.

Parents' Opinions

The parents were asked to rate their children's overall intellectual potential and then, taking into account that rating, to rate their performances in mathematics and reading.

In terms of intellectual potential, 19% of the children were rated as A (very high), 28% as B, 41% as C, 8% as D, 1% as E (very low), and 3% were not given a rating.

For mathematics, 10% of the children were rated by their parents as performing above potential and 37% below potential. For reading, 28% were rated as performing above potential and 27% below potential. These data which suggest that the PH/HI children are more likely to be having difficulty with mathematics than reading support the test data and the students' opinions.

The parents (37%) who rated their children as performing below potential in mathematics accounted for it in a wide variety of ways. One parent blamed new medication, one said the school board had moved the child around a lot, one said the child had physical difficulties with writing, three talked of personality conflicts between the teacher and child, five named poor work habits, etc. The majority of these parents wanted more individual attention, support, specialized help or specialized programs to bring their children's performance in mathematics up to potential. Two parents felt it could not be done in the regular public school system.

For the students (10%) who were rated as performing above potential in mathematics, the majority of the parents said it was due to a "special gift".

The parents (27%) who felt their children were below potential in reading also offered a wide variety of reasons although five parents said their children had learning disabilities. The majority of these parents wanted specialized programs, individualized help or remedial help to improve the level at which their children were reading.

For the students (28%) who were rated as performing above potential in reading, many parents said their children love reading, several said they emphasize reading at home and five said that reading is the only thing the child can do with a physical handicap.

The parents were also asked whether their children were receiving remedial instruction in school; 65% said "NO" of which almost half said they would like to see their children get such help. Those who said "YES" were mostly satisfied.

Teachers' Opinions

The teachers rated 148 PH/HI students on intellectual potential, mathematics and reading.

For intellectual potential, the teachers rated 18% as A (very high), 28% as B, 34% as C, 16% as D and 2% as E (very low). (2% were not rated.)

The teachers felt that 7% were performing above potential and 37% below potential in mathematics while 7% were performing above and 30% below potential in reading. These data for the larger group of PH/HI children are consistent with the data for PH/HI children actually tested and interviewed.

For those students performing below potential in mathematics, the teachers most frequently referred to the children's attitudes and work habits as the sources of the problems. They mentioned lack of interest, poor motivation, laziness, poor concentration, carelessness and negative attitudes toward math. For approximately one-quarter of the students performing below potential the teachers felt that absences due to the children's health resulted in below potential performance. In a dozen cases, emotional/family/behavioral difficulties were cited, for five children the teachers felt that the children were using their handicaps as excuses for not performing well, in three cases frequent moving was thought to be the cause and in two cases medication was blamed. A few other reasons were also given but were each associated with one or two children.

In 30% of these cases, the teachers felt that remedial help (extra help) would be needed to improve the children's performance in mathematics. Individual work, special education and smaller classes were also named as solutions. A few teachers suggested more teacher/parent co-operation or support from the home and some felt it was up to the children to improve their work habits and/or attitudes. A few other solutions, each associated with one or two children, were also given and in six cases the teachers felt nothing could be done.

The elaborations the teachers gave about the children's reading were very similar to those they gave for mathematics with a couple of exceptions. With respect to why the children are underachieving in reading, they mentioned absenteeism less frequently than for math but listed vision, hearing, language and listening difficulties for a few children. In considering solutions to the problems, counselling was mentioned a few times but the pattern of ideas was very similar to that which was found for mathematics.

Summary

The findings reported in this section consistently indicate that many of the PH/HI children are behind in their mathematics. Even though their average intellectual potential was statistically lower, their group mean score in mathematics was still statistically lower after controlling for the differences in intellectual potential. The opinions of the students, teachers and parents as to the reasons for this varied widely. Parents and teachers most frequently believed the situation could be corrected with remedial work, individual work, special help, special programs, etc. while the students tended to feel they should try in various ways to improve themselves.

There seem to be fewer PH/HI children behind in their reading. The reasons given for the children performing below potential were again varied. The solutions which were suggested were similar to those suggested for mathematics.

The neurologically impaired children tended to account for a large portion of the low scores in the three tests of intellectual potential, reading and mathematics.

When the PH/HI children were divided according to severity of their handicaps and health impairments, there were no differences in the mean scores on the three tests.

Social Variables

Comparisons between the PH/HI Students and their Controls

The means and standard deviations for the ten Social Scale variables, the two Sociogram variables and three subscales (FRIENDLINESS, PEER REJECTION, PEER CURIOSITY) of the Emotional and Social Behaviour Rating Scale are given in Tables 24, 25 and 26.

Considering first the data in Table 24, the reader will recall that the Social Scale was designed to provide data on the children's social interactions and activities as reported by the children themselves. They were asked to imagine a birthday party and to list the boys and/or girls in school they would invite. The mean numbers of children listed by the PH/HI children did not differ statistically from the control students. They were also asked to indicate which of eight activities they shared with those children listed for the party. Again, the numbers of boys and/or girls chosen and the numbers of activities shared did not differ between the PH/HI children and their controls. The number of activities the children reported doing alone also did not differ between the two groups. It seems that the PH/HI children as a group perceive their social interactions and activities in much the same way as the control children.

The Sociogram, on the other hand, provided data on how other children in the same classroom reported their social interactions with the PH/HI children and their controls.

TABLE 24

MEANS AND STANDARD DEVIATIONS ON THE SOCIAL SCALE VARIABLES FOR THE PH/HI STUDENTS AND THEIR CONTROLS

Social Scale Variable		PH/HI Students (N=81)	Control Students (N=81)
No. of boys listed	-mean	6.12	6.56
	-S.D.	(4.36)	(4.02)
No. of boys chosen	-mean	3.85	4.43
	-S.D.	(3.03)	(3.42)
No. of activities with boys	-mean	4.26	4.42
	-S.D.	(2.96)	(3.02)
No. of girls listed	-mean	5.65	5.30
	-S.D.	(4.42)	(3.85)
No. of girls chosen	-mean	3.44	3.44
	-S.D.	(3.03)	(2.68)
No. of activities with girls	-mean	3.89	4.00
	-S.D.	(3.10)	(3.07)
No. of boys & girls listed	-mean	11.77	11.95
	S.D.	(6.96)	(6.11)
No. of boys & girls chosen	-mean	7.31	7.94
	-S.D.	(3.99)	(3.57)
No. of activities with boys & girls	-mean	6.86	7.05
	-S.D.	(1.55)	(1.22)
No. of activities alone	-mean	1.12	0.94
	-S.D.	(1.53)	(1.23)

TABLE 25

MEANS AND STANDARD DEVIATIONS ON THE SOCIOGRAM VARIABLES FOR THE PH/HI STUDENTS AND THEIR CONTROLS

Sociogram Variable		PH/HI Students (N=78)	Control Students (N=78)
No. who selected student	-mean	2.27*	2.86
	-S.D.	(1.77)	(1.96)
No. who reciprocated student's choices	-mean	1.24*	1.60
	-S.D.	(1.00)	(1.09)

* The mean for the PH/HI students is significantly lower than the mean for the control students ($p \leq .05$).

TABLE 26

MEANS AND STANDARD DEVIATIONS ON THE TEACHER RATED VARIABLES FOR THE PH/HI STUDENTS AND THEIR CONTROLS

Teacher Rated Subscale		PH/HI Students (N=131)	Control Students (N=131)
*Subscale two: FRIENDLINESS	-mean	41.80	41.53
	-S.D.	(7.52)	(7.45)
**Subscale four: PEER REJECTION	-mean	28.47	28.56
	-S.D.	(4.61)	(4.25)
***Subscale six: PEER CURIOSITY	-mean	12.44	12.86
	-S.D.	(2.11)	(1.86)

* The 11 items which make up this subscale are given in Table 11.
** The 7 items which make up this subscale are given in Table 13.
*** The 3 items which make up this subscale are given in Table 15.

The mean scores (see Table 25) on the two variables were significantly lower for the PH/HI children. Thus, while the PH/HI children perceive themselves as having as many social interactions and activities as the control students, this may not, in fact, be what is happening in reality.

The teachers rated a larger group of PH/HI children and their controls on their "friendliness," whether they are "rejected" by their peers and whether their peers display "curiosity" about them. The mean scores shown in Table 26 are not statistically different.

Thus, while the PH/HI children may not be as socially accepted by their classmates as the control children, it seems not to be noticed by either the PH/HI children themselves (as a group) or their teachers.

Comparisons among the PH/HI Children

The PH/HI children were categorized according to severity of health problems and neurological impairment and analyses of variance were done to look at differences in the same social variables as above. No significant statistical differences were found related to the severity of the children's health problems for any of the social variables. That is, the children classified as moderately/severely handicapped or health impaired scored or were rated statistically the same on all the variables as those classified as mild.

However, several statistical differences were found related to neurological impairment. On the Social Scale, the neurologically impaired children listed statistically fewer boys for the birthday party, shared activities with statistically fewer boys, shared fewer activities with boys and listed fewer boys and girls for the birthday party than those who were not neurologically impaired. That is, the neurologically impaired scored significantly lower on four of the ten Social Scale variables. Further examination of the data proved that these differences associated with the neurologically impaired had no relationship to their sex. The means for these variables are illustrated in Table 27.

The teachers rated the neurologically impaired as less friendly, more rejected by peers and the object of more peer curiosity than those not neurologically impaired. And, finally, in the case of the Sociogram, a statistically significant inter- action showed up in the results which, translated, means that the neurologically impaired children who were also moderately/severely handicapped had fewer reciprocated social choices than the other PH/HI students. (Table 27.)

Students' Opinions

The majority (76%) of the PH/HI students rated themselves as GOOD or VERY GOOD when asked, "How are you getting along with your classmates this year?" Only 6% said POOR or VERY POOR. (The remainder said IN BETWEEN.) Their elaborations on why they were getting along well were made up of such positive statements as, "I feel accepted and treated well," "I have lots of fun with my friends," "I am

TABLE 27

MEANS ON THE SOCIAL VARIABLES FOR THE PH/HI CHILDREN CATEGORIZED ACCORDING TO NEUROLOGICAL IMPAIRMENT

Social Variable	Neurologically Impaired	Not Neurologically Impaired
No. of boys listed	3.73*	7.25
No. of boys chosen	2.61*	4.43
No. of activities with boys	3.12*	4.80
No. of girls listed	4.76	6.07
No. of girls chosen	3.30	3.50
No. of activities with girls	3.96	3.86
No. of boys & girls listed	8.50*	13.31
No. of boys & girls chosen	5.92	7.96
No. of activities with boys & girls	6.46	7.05
No. of activities alone	1.54	0.92
No. who selected student	1.92	2.43
No. who reciprocated student's choices	0.91**	1.39
FRIENDLINESS	38.74*	43.00
PEER REJECTION	27.05*	29.01
PEER CURIOSITY	11.66*	12.73

* The mean for the neurologically impaired is significantly lower than the mean for those who are not neurologically impaired.

** An interaction effect was significant for this variable. The neurologically impaired who were also moderately/severely handicapped scored lowest (mean = 0.50).

not bothered by others," and "I share things with my friends."

Even with such positive responses, 62% felt they could still get along better with their classmates and came up with a wide variety of matter-of-fact ways to improve the situation such as sharing things more often, playing together, etc. One student wanted instruction on how to make friends and one student felt that poor attendance prevented good friendships. A few felt that other students could improve the situation.

Parents' Opinions

The parents were asked to rate their children's social adjustment in school on a five-point scale (A for very high, B, C, D, E for very low). The majority, 62%, rated them as A or B, the minority, 10%, rated them as D or E. Two reasons were frequently given for good adjustment; first, the children are friendly and outgoing and second, the school personnel and peers are friendly.

Of the eight parents who chose a rating of D or E, three said others picked on their children and two said they were strict and didn't allow their children to socialize. Two parents suggested that the situation could be improved by closer parent/teacher co-operation, one suggested individualized help on socialization and one thought a stable male figure in the home would help.

Teachers' Opinions

The teachers were also asked to rate the students' social adjustment on a five-point scale; 49% rated 148 students as A or B and 24% rated them as D or E.

A large percentage of the teachers who chose ratings of A or B attributed it to positive qualities possessed by the children. A smaller number talked of good home life and family attitudes and a few mentioned that the students were well adjusted to their handicaps or health impairments. Several other explanations, each for one or two children, were also given - one teacher said that physically handicapped people had spoken at the school and it had helped.

Many of the teachers who rated children as D or E attributed the poor social adjustment to difficult personality characteristics such as aggressiveness, immaturity, nervousness, temper outbursts, etc. Some mentioned family problems and poor family attitudes. A few felt that the physical handicaps or health impairments directly limited the students' social interactions and a couple felt that the children had not adjusted well to their health problems.

For those children rated low on social adjustment, the teachers most often favored some form of counselling or individual help to do such things as work on the children's self-image, to prepare them for a life with limitations or to teach problem solving and responsibility. In a few cases, the teachers felt that the parents needed counselling. A few felt that improvement should be allowed to occur naturally and a couple felt that the other students in the classroom should be counselled.

Summary

The PH/HI children (as a group) seem to perceive the social situation as positively as do their peers and their parents tend to agree. The teachers also rated the children as doing fairly well in this area although some felt that counselling or individual help (among other solutions) might help some children.

However, there is a suggestion in the data (seemingly not too obvious to the parents and PH/HI children themselves) that other students could be more accepting of the PH/HI children particularly those who are both neurologically impaired and moderately/severely handicapped.

Further analyses indicated that when the PH/HI children were categorized according to neurological impairment, several significantly lower scores on the social variables were associated with the neurologically impaired. These variables included teacher ratings, other students' acceptance and the students' own perceptions.

When the PH/HI children were categorized according to severity of handicap, no differences appeared for any of the social variables with the exception of the one variable (number who reciprocated student's choices) which was also associated with the neurologically impaired.

Self-Concept Variables

Comparisons between the PH/HI Students and their Controls

The means and standard deviations for the four subscales and the total score of the IOX Self Appraisal Inventory are shown in Table 28. No statistically significant differences exist between the PH/HI students and their controls for the five sets of means. Thus the PH/HI students seem to feel as good about their peer relationships, school experiences, family relationships and generally about themselves as do the control students. The results for the Peer Subscale are especially interesting since they support the findings discussed in the preceding section - the children appear to feel good about their social relationships and activities.

Table 29 shows the means and standard deviations on the INFERIORITY Subscale rated by the teachers. These means are also not statistically significant thus corroborating the students' own estimations of themselves.

Comparisons among the PH/HI Students

No statistical differences were discovered on any of the self-concept variables when the PH/HI students were categorized by either severity of handicap or neurological impairment.

Students' Opinions

The majority of the students (72%) reported during

TABLE 28

MEANS AND STANDARD DEVIATIONS FOR THE IOX SELF-APPRAISAL INVENTORY FOR THE PH/HI STUDENTS AND THEIR CONTROLS

IOX Score		PH/HI Students (N=80)	Control Students (N=80)
Peer Subscale	-mean	13.50	14.34
	-S.D.	(3.87)	(3.16)
School Subscale	-mean	13.79	13.65
	-S.D.	(4.12)	(4.24)
Family Subscale	-mean	15.16	16.03
	-S.D.	(3.33)	(2.94)
General Subscale	-mean	14.83	15.00
	-S.D.	(3.02)	(2.98)
Total Score	-mean	57.28	59.01
	-S.D.	(11.25)	(9.97)

TABLE 29

MEANS AND STANDARD DEVIATIONS ON THE TEACHER RATED VARIABLE FOR THE PH/HI CHILDREN AND THEIR CONTROLS

Teacher Rated Subscale		PH/HI Students (N=131)	Control Students (N=131)
*Subscale three: INFERIORITY	-mean	23.49	24.10
	-S.D.	(4.77)	(4.48)

* The 7 items which make up this subscale are given in Table 12.

their interviews that they felt VERY HAPPY or HAPPY about being in their respective schools. Only 2% said they felt SAD or VERY SAD. Their elaborations were typical of students who like school - they reported having lots of friends, liking their teachers, enjoying the atmosphere of the school, liking the schools' facilities and activities, etc. Five students said they liked being at certain schools because of the proximity to their homes. One student commented on how nice it was to be treated as a regular student. Less than half a dozen students complained of being teased or of no one playing with them.

Parents' Opinions

The parents were asked if their children were reluctant to go to school - 81% said "NO." The elaborations of those parents who said "YES" were as follows:

- Child has poor attitude towards school (3 parents)
- Child doesn't like a particular school (2)
- Child has no confidence in school personnel regarding physical handicap (2)
- When weather is bad (1)
- Other students are smaller and younger (1)
- When child is ill (1)
- Poor teacher/student relationships (1)
- Child doesn't like students and teachers (1)
- Child frustrated due to lack of specialized therapy and physical education program (1)
- Child loves to stay with parents (1)

Summary

There is fairly strong evidence in the data reported in this section to suggest that most of the PH/HI children have good self-concepts with respect to peer relationships, school experiences, family relationships and themselves in general.

These findings did not vary when the children were categorized according to severity of health problems or neurological impairment.

Emotional and Behavioral Variables

Comparisons between PH/HI Students and their Controls

The teachers rated the PH/HI students much the same as their controls in terms of maturity, accountability and clinging nature. There were no significant differences in the means shown in Table 30.

Comparisons among the PH/HI Students

Categorizing the PH/HI children according to severity of handicap and comparing the means for maturity, accountability and clinging nature produced no significant differences.

However, categorization by neurological impairment revealed that the teachers felt the PH/HI children who were neurologically impaired tended to be less accountable which, as defined by the items on the subscale, meant that the teachers felt they were less collected, less responsible, less consistent, less likely to complete activities and more likely to daydream. The teachers also felt that the neurologically impaired were more likely to cling, whine and ask for too much comfort and praise. The mean scores are

TABLE 30

MEANS AND STANDARD DEVIATIONS FOR TEACHER RATED VARIABLES FOR PH/HI STUDENTS AND THEIR CONTROLS

Teacher Rated Subscale		PH/HI Students (N=131)	Control Students (N=131)
*Subscale one: MATURITY	-mean	154.20	149.16
	-S.D.	(23.11)	(25.83)
**Subscale five: ACCOUNTABILITY	-mean	18.23	17.63
	-S.D.	(3.92)	(3.66)
***Subscale seven: CLINGING NATURE	-mean	12.66	12.76
	-S.D.	(2.18)	(1.94)

* The 38 items which make up this subscale are given in Table 10.
** The 5 items which make up this subscale are given in Table 14.
*** The 3 items which make up this subscale are given in Table 16.

TABLE 31

MEANS FOR TEACHER RATED VARIABLES FOR PH/HI STUDENTS CATEGORIZED ACCORDING TO NEUROLOGICAL IMPAIRMENT

Teacher Rated Subscale	Neurologically Impaired Students (N=42)	Not Neurologically Impaired Students (N=86)
MATURITY	150.55	155.01
ACCOUNTABILITY	16.95*	18.77
CLINGING NATURE	11.71*	13.05

* The mean for the neurologically impaired is significantly lower than the mean for those who are not neurologically impaired.

given in Table 31.

Students' Opinions

The greater number (79%) of PH/HI children rated their own behavior in class as VERY GOOD or GOOD while 4% felt their behavior was POOR or VERY POOR. However, in spite of the high ratings, 73% still thought their behavior could be better. The children's elaborations to these ratings added very little in the way of extra information.

Parents' Opinions

Less than half of the parents (44%) rated their children's emotional adjustment as good (A or B) while 24% gave low ratings (D or E). The elaborations from parents who gave high ratings were similar to those one might expect to hear from any parent with the exception of two who felt that their children were mature because of the physical handicaps.

The parents who gave low ratings for their children's emotional adjustment explained as follows (some parents gave two explanations):

-Child is unhappy about physical problem (5 parents)
-Child has difficult attitudes/moods (4)
-Child feels different (3)
-Child doesn't like school (3)
-Child has deep-rooted emotional problems (2)
-Child lacks self-confidence (2)
-Child is shy (1)
-Child is confused about role at home and at school (1)
-Child is restricted from participating in physical education and is unhappy (1)

Eight of the parents who rated their children low felt that help was needed from school personnel, three favored special programs such as in physical education and one felt that the teacher should not centre the child out so much. One wanted more discipline, another wanted to eliminate the pass/fail system and another felt the student just needed his own "space."

Teachers' Opinions

The teachers rated 52% of 148 PH/HI children as high (A or B) on emotional adjustment and 22% as low (D or E). Many teachers attributed the good adjustment to positive qualities of the children, several praised the children's families and several mentioned the children's good attitudes towards their handicaps. Several other elaborations were also given.

For those children who received low ratings, the teachers most frequently accounted for the poor adjustment in terms of poor family life, adjustment and/or home circumstances. Several teachers saw the children as shy or immature, three children were thought to be frustrated by their physical limitations, two were described as acting older than their peers and two were said to be too demanding. Other ideas, each associated with one child, were also given.

In order to improve the situation for those children rated low, the teachers most favored counselling for the parents, children or both. Four teachers suggested that improvement should be allowed to occur naturally, two felt that they themselves needed help in order to help the children, and one thought a high school work and study program would be good. A few other ideas were also suggested.

Summary

Some of the PH/HI children, approximately 25%, seem to have emotional and behavioral problems. These children, who are quite likely to be neurologically impaired, are rated by the teachers as having clinging natures and as not being too accountable.

The parents and teachers described the emotional/behavioral difficulties and the sources of the difficulties in a number of different ways. In order to correct the problems, the parents tended to favor help from school personnel and special programs whereas the teachers tended to favor counselling for the children and/or their parents.

Attendance

Comparisons between PH/HI Students and their Controls

The PH/HI students (N=84) had a significantly higher rate of absenteeism than their academic controls (those children of the same sex and closest in age). The PH/HI students were absent, on the average in the 1980-81 school year, 6.1% of the time compared with the control students rate of absenteeism of 4.4%.

Comparisons among the PH/HI Students

No significant differences were found in the rates of absenteeism when the PH/HI students were categorized either according to severity of handicap or neurological impairment.

Students' Opinions

Several of the PH/HI students (35%) reported that they had missed more than two weeks of school (at the time they were interviewed - spring of 1981) in that school year. A few had missed more than five weeks of school. Flu and colds seemed to account for a lot of the absenteeism. A few children had spent time in the hospital, a few were home because of their physical handicaps or health impairments (e.g., asthma, diabetes), two had chicken pox and two said they had been in pain. The others reported ailments not uncommon to all children. One student talked of a lot of doctor appointments.

Summary

The PH/HI children had higher rates of absenteeism than the N-PH/HI children. The reasons were quite varied.

Transportation

Principals' and Parents' Opinions

The principals spoke about transportation to and from school for 152 PH/HI children while the parents' comments involved a subset of 78 children. Their opinions about transportation were very much the same.

The majority of the children (approximately 80%) go to school on foot. Of the remaining 20%, roughly 7% use a school bus, 6% use the T.T.C., 3% travel in the family car, 2% make use of a station wagon, 1% use a taxi and 1% use a wheelchair van. The Toronto Board has a contract with All-Way Transportation Services for the buses, station wagons and wheelchair vans.

Parents and principals felt that 8 or 9 of the children could have better transportation to and from school. For half of these, the parents felt that the Toronto Board of Education should provide special transportation. For others, the special transportation seemed to be unreliable and inconvenient often causing the children to miss school and/or preventing them from participating in extra-curricular activities. A couple of children were reported as needing one-to-one help while travelling. One principal felt that the school bus should have seat belts and another felt that there were too many children using one school bus.

The children reported as needing better transportation had spinal muscular atrophy, triplegia, cardiac surgery, diabetes, cerebral dysrythmia, neuropathy ataxia and hemophilia.

Physical Education

Parents' Opinions

A fair number of parents - 27 of 78 - expressed dissatisfaction with the physical education programs their children were receiving in school. The reasons they gave for their dissatisfaction are listed in Table 32. Many of the parents feel that special programs, exercises, teachers, etc. are needed. Upon more closely examining the characteristics of these 27 children, it was found that they were quite representative of all the PH/HI children in terms of classifications according to neurological impairment, severity of health problems and kinds of handicaps and health impairments.

TABLE 32

REASONS PARENTS GAVE FOR BEING DISSATISFIED WITH THE PHYSICAL EDUCATION PROGRAMS RECEIVED BY THEIR PH/HI CHILDREN (N=27)

Reason for Dissatisfaction	Number of Parents*
Child requires special help/program in physical education..	21
Child needs special exercises............................	7
Child needs physical education teacher who understands problem...	4
Child needs specialized gym classes......................	3
Agreement is needed between school authorities (Doctor) and family Doctor..	3
Child needs alternatives to physical education............	3
Child is stigmatized by physical education personnel.......	2
Not enough physical education for all children............	2
Need more emphasis on team sports........................	2
Need more emphasis on non-contact sports..................	1
Child needs help with emotional outlook...................	1
Girls are discriminated against..........................	1

*Some parents gave more than one reason; a few gave no reason.

Table 33 illustrates the elaborations of those parents who expressed satisfaction. It is interesting to note that only 4 or 5 parents are satisfied because their children are exempted from physical education. Many parents are satisfied because their children are allowed to participate to tolerance or as the children wish. A few teachers have obviously developed individualized physical education programs for the PH/HI children.

Teachers' Opinions

According to the teachers, 26% of 148 PH/HI students could have better participation in physical education and/or other similar activities. The teachers' descriptions of how they were participating are shown in Table 34; approximately 62% were fully participating in the regular physical education program. With respect to improvements, the teachers offered a wide variety of suggestions, the most frequently mentioned being special/individualized programs, more information from therapists, more specialized help, more assistants, more enthusiasm on the part of the students, more swimming, more suitable equipment, more updated medical information and more encouragement from parents.

Summary

It appears that some (about 30%) PH/HI children could benefit from more attention in physical education. Special, individualized help and/or programs and better information and communication are strongly favored by the parents and

TABLE 33

REASONS PARENTS GAVE FOR BEING SATISFIED WITH THE PHYSICAL EDUCATION PROGRAMS RECEIVED BY THEIR PH/HI CHILDREN (N=48)

Reason for Satisfaction	Number of Parents*
Child is allowed to participate to tolerance	18
Child enjoys physical education program	13
Child is allowed to participate as she/he wishes	7
Special physical education teacher has helped student in developing individual program	5
Child is exempted from physical education	4
School has above average physical education program	3
Child gets alternative academic help	1

*Some parents gave more than one reason; a few gave no reason.

TABLE 34

TEACHERS' DESCRIPTIONS OF HOW STUDENTS PARTICIPATE IN THE PHYSICAL EDUCATION PROGRAMS AND/OR ACTIVITIES (N=148)

Teacher Description	Number of Students*
Participates fully in the regular physical education program	92
Participates on a limited basis in the regular physical education program	39
Engages in no physical activity	11
Engages in physical activity on his/her own during school	6
Engages in exercises under the direction of a nurse, therapist or other trained person	3

*A couple of teachers gave more than one description for a student.

teachers of these children.

Extra-Curricular Activities

Students' Opinions

Close to one-third of the students felt there were activities they would like to do in school, but couldn't. Most named physical education and gym activities, four said field trips, two said music and one said industrial arts. It should be noted that the students were not asked a separate question about physical education.

Parents' Opinions

Most of the parents (80%) expressed satisfaction with their children's participation in such school activities as music, art and field trips; only 10% expressed dissatisfaction. These parents wanted more music and/or field trips.

Summary

There appears to be considerable satisfaction with the PH/HI children's activities in music, art and field trips. As noted in the preceding section, there is less satisfaction with physical education programs and/or activities.

School Accessibility

Students' and Teachers' Opinions

There are very few PH/HI children in Toronto schools who find the schools and various areas within the schools inaccessible and, for those who do, stairs are the primary problem. These findings are given in Table 35. However, it cannot therefore be assumed that the Toronto schools are easily accessible to handicapped children.

In a very few cases, teachers and students referred to a school elevator, bannister, railing, or lack of elevation and/or stairs as that which made the school accessible to a student.

Parents' Opinions

Parents of 30% of the students felt that the schools and the areas within were not easily accessible to their children. Over half of them felt that the solution would be to put the children on the main floor of the school. Others suggested elevators, ramps, buddies, escalators and brighter stairwells.

Summary

There are not a lot of severely handicapped children in Toronto schools, inaccessibility may be one reason. For those who are in the schools and are having difficulties, stairs are a major problem.

More will be said of this topic in a later section.

TABLE 35

AREAS OF SCHOOLS NOT EASILY ACCESSIBLE TO PH/HI STUDENTS AND REASONS FOR INACCESSIBILITY

School Area	Number of Students Who Find Area Inaccessible*	
	Students' Responses (N=82)	Teachers' Responses (N=148)
Main school entrance	2 (stairs)	3 (stairs)
Other school entrances	1 (stairs)	4 (stairs)
Ground level floor	-	1
Lower floors	1 (stairs)	1 (stairs)
Upper floors	3 (stairs)	6 (stairs)
Regular classroom(s)	2 (stairs)	-
Special classroom(s)	1 (stairs)	1 (stairs)
Library	1 (stairs)	1 (stairs)
Science room (center)	1 (stairs)	-
Gymnasium	2 (stairs)	1 (stairs)
Auditorium	2 (stairs)	1 (stairs)
Washroom(s)	1 (stairs) 1 (heavy door) 1 (too far away)	- - -
Cafeteria/Lunchroom	2 (stairs) 1 (awkward benches)	- -
Office	-	-
Nurse's room	1 (stairs)	-
Play area (indoors)	2 (stairs)	-
Play area (outdoors)	2 (stairs)	-
Stage	2 (stairs)	2 (stairs)
Music room	2 (stairs) 1 (heavy door)	1 (stairs) -

* One student could be represented several times in this table.

Convenience of School Facilities

Students' and Teachers' Opinions

Most of the PH/HI students use the various school facilities and find them convenient. Table 36 indicates the small numbers who don't and some of the reasons; gymnasium and playground facilities are either not used or are very inconvenient to more students than the other facilities. However, these data do not necessarily mean that the facilities of the schools are convenient for handicapped children since there were, at the time of this study, very few severely handicapped children integrated in the system. It is interesting to note that three of the students found the schools' elevators unuseable or inconvenient - four elementary Toronto schools have elevators.

In a very few instances, the teachers commented on the fact that a certain facility was adjustable, well designed or a special item (typewriter) and was thus convenient to the handicapped child.

Only a couple of students reported having had accidents related to the physical facilities of the schools.

Parents' Opinions

The parents reported that for approximately 12% of the PH/HI students the facilities of the schools are not convenient. They made the following suggestions for improvement:

TABLE 36

FACILITIES OF SCHOOLS NOT CONVENIENT TO PH/HI STUDENTS AND REASONS FOR INCONVENIENCE

	Number of Students Who Find Facility Inconvenient*	
School Facility	Students' Responses (N=82)	Teachers' Responses (N=148)
Drinking fountains	1(**)	1(poor design for wheelchair)
Classroom sinks	1(**)	-
Classroom desks/tables	-	-
Toilets	1(**)	1(not close enough)
Lockers	1(**)	2(difficulty with lock) 1(too high) 1(poor design for wheelchair) 1(**)
Washroom sinks	2(**)	2(**) 1(poor design for wheelchair) 1(no privacy)
Elevators	2(**) 1	-
Swimming pool	3(**) 1	6(**) 1(too high)
Library shelves	-	7(too high)
Cafeteria facilities	-	1(**)
Gymnasium facilities	11(**)	16(**) 1(too high) 1(poor design for wheelchair) 1(not appropriate)
Playground facilities	6(**)	4(**) 3(too high) 1(poor design for wheelchair) 1(not appropriate)
School bus	2(**)	2(too high) 1(steps difficult)

* One student could be represented several times in this table.

** Child does not use or has very restricted use of facility because of handicap.

- volunteer/assistant to accompany student to various facilities (e.g., toilet)
- washrooms on each floor
- alternative to lockers
- water fountains sensitive to touch

According to parents, very few children had accidents associated with the physical facilities of the schools.

Summary

The school facilities are useable and convenient for most of the PH/HI students; however, it must be remembered that very few of the children were rated as severely handicapped.

More will be said of this topic later.

Special Services

Parents' and Teachers' Opinions

Table 37 indicates, according to the parents (N=78) and teachers (N=148), how many PH/HI students need special services while in school. Several of these will be discussed separately:

Remedial academic help. The teachers and parents estimated that over 40% of the PH/HI students need remedial academic help. Many of the students were reported as receiving such help from regular teachers and special education teachers. A few students were getting help from teachers with special training or itinerant/resource

TABLE 37

SPECIAL SERVICES WHICH PH/HI STUDENTS REQUIRE WHILE IN SCHOOL

Special Service	Number of Students Who Require Service*	
	Parents' Responses (N=78)	Teachers' Responses (N=148)
Dressing	5	3
Eating	1	-
Toileting	3	2
Medical care	12	25
Medication	10	29
Mobility	11	8
Repositioning	1	1
Physical therapy	13	6
Speech therapy	11	10
Occupational therapy	8	4
Psychological counselling	18	25
Remedial academic help	35	64
Taping service for note taking	6	1
Help with listening	14	9
Help with reading	25	13
Help with writing	17	14
Help with talking	11	8
Repairs for orthopedic equipment	5	1
Help for seizures/convulsions/comas	15	13
Help with English (ESL)	1	1
Awareness program for regular students	1	-
Play therapy	-	1
Humidifier	-	1
Help with grooming, hygiene	-	1
Help with nutrition	-	1
Family counselling	-	1
Help with social skills	-	1
Special art activities	-	1
Special physical activities	-	4
Special after-school activities	-	1
Help in case of emergency	30	**

* One student may be represented more than once in this table.

** The parents, but not the teachers, were asked about this topic in a separate question.

teachers, a few from educational assistants or volunteers and a few from parents or peers. A few were getting no help.

A large proportion of the teachers felt that, in an ideal situation, the remedial help should be provided by special education teachers. They were not so likely to suggest regular teachers, teachers with special training or itinerant/resource teachers.

The parents, on the other hand, most frequently felt that the help should come from teachers with special training and less frequently mentioned special education teachers, regular teachers or itinerant/resource teachers.

Very few parents or teachers favored such help being provided by educational assistants, volunteers, guidance counsellors, parents, siblings or peers.

Psychological counselling. The parents and teachers considered approximately one-fifth of the PH/HI students to be in need of psychological counselling, several of whom they said were not receiving such help. The remainder were getting counselling from a wide variety of people (regular teachers, special education teachers, principals, vice-principals, guidance counsellors, psychologists, social workers, nurses, consultants, parents and peers).

The largest portion of both parents and teachers felt such help should be given by psychologists or guidance counsellors; the teachers also named social workers or teachers with special training quite frequently. Very few felt that regular teachers, special education teachers or principals/vice-principals should be responsible for psychological counselling.

Medical care. Approximately 15% of the PH/HI children require medical care while in school and most of the parents and teachers believe this should be taken care of by doctors or nurses. Four parents felt that a crisis teacher with special training would be useful.

In actuality, most were receiving medical help from doctors or nurses, although a few were receiving no help. In a couple of cases, parents were providing the services and in a couple of cases the students were administering the services to themselves.

Of 148 teachers, 19 did not know whether the student needed special medical services while in school.

Medication. Approximately 15% of the children need to take medication while in school. Many of them are responsible for it themselves and the greatest number of the teachers felt that this is the best arrangement. However, none of the parents felt this to be an ideal arrangement. The parents tended to want the medication administered by nurses.

The parents reported the following problems associated with their children taking medication in school:

- -School won't take responsibility (3 parents)
- -Teacher can't cope with equipment (2)
- -Teacher centres student out as he/she is taking medication (2)
- -Nurse refuses to help with medication (1)
- -Teacher is hysterical about the problem (1)

-Teacher doesn't understand the problem (1)
-Medication is too hard to control in school setting (1)
-School needed letter from Crippled Children's Centre informing school personnel of crisis procedures (1)

Several teachers also thought that doctors, nurses or parents should have the responsibility and, in fact, this does occur for some children.

Few felt that regular teachers, principals/vice-principals, siblings or peers should be involved with medication and, in fact, this is rarely the case.

Of 148 teachers, 21 did not know whether the student needed medication while in school.

Help with reading. Teachers and parents estimated that several children need help with reading. A few were not receiving it while many of the others were getting it from regular teachers and special education teachers.

Both parents and teachers mostly felt that the help should come from teachers with special training, regular teachers or special education teachers. Four of the parents suggested educational assistants.

Help with listening. Some PH/HI children need help with listening and a few were not receiving it. Those who were getting help were mostly receiving it from regular teachers and special education teachers.

Many parents felt that the help should be coming from teachers with special training. Others suggested regular teachers, special education teachers, therapists and mechanical/electronic devices.

The teachers mostly felt the help should be coming from regular teachers, special education teachers or teachers with special training.

Help with writing. The students who needed help with writing were mostly getting it from regular teachers or special education teachers. A few were not getting any help. A couple had use of electronic and mechanical devices. Four parents reported helping their children in this area.

Several parents felt that, in an ideal situation, children needed teachers with special training to help with writing while most of the others favored regular teachers or special education teachers.

The teachers mostly felt the job should be done by special education teachers or regular teachers.

Electronic and mechanical devices were mentioned in a couple of instances.

Help with talking. Ideally, most of the parents felt that their children should get help with talking from teachers with special training or therapists. The teachers most frequently named special education teachers or teachers with special training.

The majority of the students in need of help with talking were said to be receiving it - a variety of people were named as helpers.

Help for seizures/convulsions/comas. The majority of both parents and teachers felt that help in this area should come from nurses and doctors.

The students who were getting help (a few weren't) received it from a variety of persons with regular teachers being most frequently involved.

The number who need such help is given in Table 37.

Physical therapy. Parents and teachers reported that many of the children who need physical therapy were not receiving it while in school and most favored therapists for the help.

Speech therapy. The majority of parents and teachers who knew of children who need speech therapy felt that therapists should provide it - this was not happening for most children. Teachers with special training and special education teachers were also thought appropriate by some.

The parents felt that most of the children who needed it were not getting it - more of the teachers seemed to feel they were receiving help.

Mobility. The majority of the children who needed help with mobility were receiving it - a wide variety of people were named. And, both parents and teachers suggested a wide variety of people as the ideal providers of this service. In a couple of cases, electronic and mechanical devices were felt to be most appropriate and helpful.

Occupational therapy. The parents reported that 6 of 8 children who needed this service were not receiving it. They felt that therapists or teachers with special training would be the ideal providers.

Taping service for note taking. Five of six parents said their children were not getting this service. They thought the service could be provided by regular teachers, mechanical devices, electronic devices, peers, teachers with special training or therapists.

Repairs for orthopedic equipment. All five parents said their children could not get repairs for their orthopedic equipment at school. They suggested it should be done by the school board, the caretaker, the doctor, a volunteer, the vice-principal or a teacher with special training.

Help in case of emergency. Close to 40% of the parents said their children would need special help in case of a school emergency. Half of the parents didn't know if the principals had made arrangements for such help, 30% said the principals had not and 20% said they had. The parents elaborated as follows (some parents gave more than one response):

- -Student has respiratory problem (12 parents)
- -Student can't move quickly (9)
- -A crisis might bring on a problem (6)
- -Student would require an assistant to lead him/her out (4)
- -Student has to be carried (2)
- -Student needs immediate medication if hurt (2)
- -Student is on crutches (1)

Just over 30% of the 78 parents said that there would be no one at home if the child needed to go home at noon or during an emergency.

Students' Opinions

Approximately 20% of the students said their friends have to help them in special ways while in school. They gave the following elaborations (some students gave more than one response):

- -Carry things (5 students)
- -Open doors (4)
- -Help with school work (4)
- -Help on stairs (4)
- -Help between classrooms (2)
- -Help with falls (2)
- -Help during fire drill (1)
- -Help with seeing (1)
- -Help with coat (1)
- -Help with lunch (1)
- -Help with elevator (1)
- -Help with repositioning (1)

Summary

The PH/HI students are most likely to need special services while in school in the areas of remedial academic help, pyschological counselling, medication, medical care, help with reading, help with writing, help for seizures/convulsions/comas and help in case of emergency.

For most of the special services listed in Table 37, the majority of the students are receiving some form of help. However, in the areas of psychological counselling, physical therapy, speech therapy, occupational therapy, note-taking, repairs for orthopedic equipment, and help in case of emergency, those who need the help are frequently not getting it. In the case of psychological counselling, parents and teachers most frequently named psychologists or guidance counsellors as the ideal providers. In the cases of physical, speech and occupational therapies, therapists were frequently named.

Regular teachers and special education teachers are the ones who are providing most of the special services to the children, although doctors and nurses are often involved with medical care and the students frequently take care of their own medication. Principals, vice-principals and guidance counsellors are not so often involved. There are few teachers with special training, crisis teachers, itinerant/resource teachers or consultants helping the children. Psychologists and social workers were rarely referred to. There are few therapists involved with the children while they are in school. Clergy were never mentioned. Educational assistants and volunteers, secretaries and caretakers, and parents, siblings and peers are not often providing the services to the children. There are very few mechanical and electronic devices being used.

Very generally, the parents and teachers did not feel that the regular teachers were the ideal providers of the special services. The parents tended to favor teachers with special training whereas the teachers tended to favor special education teachers and teachers with special training. This trend is well illustrated in the case of remedial academic help.

The parents put a strong emphasis on the nurses providing services in the area of medication whereas many of the teachers felt that the children were quite capable of doing it themselves.

Both parents and teachers mostly wanted nurses and/or doctors to help in the areas of medical care and seizures/convulsions/comas.

Electronic and mechanical devices were rarely seen as solutions.

Educational assistants and volunteers were rarely seen as ideal providers of such services.

Ages of Students

The ages of the 84 PH/HI students who participated in the study were compared with the ages of their controls who were of the same sex and randomly selected from the classrooms (regular or special education) where the PH/HI children spent most of their time. This comparison was done to determine whether PH/HI children are older than their classmates.

The average age in months of the PH/HI children was 146.6 while for the controls it was 144.1. The difference is not statistically different; therefore, it can be concluded that the PH/HI students are not older on the average than their classmates.

Teachers' Feelings about Students

During the interview, the teachers (N=148) were asked to describe how they personally felt about having the PH/HI children in their classrooms. A summary of their responses is shown in Table 38. The vast majority of the responses were positive with a few teachers expressing concern, frustration, nervousness, protectiveness, worry, etc.

TABLE 38

TEACHERS' PERSONAL FEELINGS ABOUT HAVING THE PH/HI STUDENTS IN THEIR CLASSROOMS (N=148)

Feeling	Percentage of Teachers who Expressed Feeling*
Fine/O.K./no bother/comfortable	43%
A pleasure/likes student	36%
Great/nice/good	20%
Same as for other students	18%
Upset/concerned	4%
Frustrated/cannot give student more	3%
Challenged	3%
Protective	1%
Frustrated/lack of knowledge	1%
Nervous about seizures	1%
Wants to help more	1%
Nothing	1%
Unaware of problem	1%
Sorry	1/2%
Unqualified	1/2%
Worried about gym	1/2%

* Some teachers gave more than one response.

The reader will recall that the teachers were also asked to complete a 26-item questionnaire to describe their feelings about the PH/HI students and their controls. As a reminder, the items on the three subscales of that questionnaire are as follows:

Subscale One: Agreeable Feelings

(1) I like having this student in the classroom.

(2) I feel comfortable with this student.

(3) I think highly of this student.

(4) I respect this student.

(5) I miss this student when he/she is away.

(6) When I see this student I feel good.

(7) I am delighted to know this student.

(8) This student pleases me.

(9) I get along with this student.

(10) I enjoy working with this student.

Subscale Two: Disquietive Feelings

(1) This student makes me feel tense.

(2) I stare at this student.

(3) This student embarrasses me.

(4) This student upsets me.

(5) I am afraid to play or work with this student.

(6) I am careful about what I say to this student.

(7) I stay away from this student.

Subscale Three: Protective Feelings

(1) I help this student too much.

(2) I feel sorry for this student.

(3) I protect this student.

(4) I worry about this student.

(5) This student takes up too much of my time.

Comparisons between the PH/HI Students and their Controls

The means and standard deviations for the three subscales of the questionnaire which measured "agreeable," "disquietive" and "protective" feelings are shown in Table 39. Statistical tests indicated no differences in the means of the PH/HI students and their controls.

TABLE 39

MEANS AND STANDARD DEVIATIONS FOR VARIABLES ON TEACHERS' FEELINGS FOR PH/HI STUDENTS AND THEIR CONTROLS

Teachers' Feelings		PH/HI Students (N=131)	Control Students (N=131)
*AGREEABLE FEELINGS			
	-mean	39.4	38.2
	-S.D.	7.0	7.5
**DISQUIETIVE FEELINGS			
	-mean	30.8	30.7
	-S.D.	3.8	3.7
***PROTECTIVE FEELINGS			
	-mean	18.3	18.7
	-S.D.	4.1	4.2

* The 10 items which make up this subscale are given in Table 7.
** The 7 items which make up this subscale are given in Table 8.
*** The 5 items which make up this subscale are given in Table 9.

Comparisons among the PH/HI Students

Tables 40 and 41 show the means of the PH/HI students on the three subscales when the students were categorized according to severity of health problems and neurological impairment.

TABLE 40

MEANS FOR VARIABLES ON TEACHERS' FEELINGS CATEGORIZED ACCORDING TO SEVERITY OF HEALTH PROBLEMS

Teachers' Feelings	Mild (N=67)	Moderate and Severe (N=61)
AGREEABLE FEELINGS	40.0	38.6
DISQUIETIVE FEELINGS	30.9	30.5
PROTECTIVE FEELINGS	19.1*	17.4

* The mean score for those children rated as mild is significantly different from the mean score of those rated as moderate and severe ($p \leq .05$).

TABLE 41

MEANS FOR VARIABLES ON TEACHERS' FEELINGS CATEGORIZED ACCORDING TO NEUROLOGICAL IMPAIRMENT

Teachers' Feelings	Neurologically Impaired Students (N=42)	Not Neurologically Impaired Students (N=86)
AGREEABLE FEELINGS	38.6	39.6
DISQUIETIVE FEELINGS	30.6	30.8
PROTECTIVE FEELINGS	17.0*	18.9

* The mean score for those children categorized as neurologically impaired is significantly different from the mean score of those categorized as not neurologically impaired ($p \leq .05$).

While no differences were found in the teachers' "agreeable" and "disquietive" feelings among the different groups of PH/HI students, the teachers do feel significantly more "protective" not only to the neurologically impaired but to the moderately/severely handicapped.

Summary

On the whole, it seems that teachers feel much the same toward PH/HI students as they do toward other students.

The neurologically impaired elicit more "protective" feelings from teachers than those not neurologically impaired.

The moderately/severely handicapped elicit more "protective" feelings from teachers than the mildly handicapped.

Teachers' Knowledge and Understanding about Students

The teachers were asked to rate, on a five-point scale (excellent, good, mediocre, poor, very poor), their knowledge and understanding of the PH/HI students in eleven different areas. The results are summarized in Table 42.

The teachers obviously felt most knowledgeable about the students in the areas of communication, ambulation, physical activities and toileting. However, this is not too surprising given the fact that very few students were rated as having severe health or physical problems and consequently very few would have problems in these areas which would be difficult to understand.

Teachers felt less secure in their knowledge and understanding of the children's therapy and medical needs, family and medical histories and the nature of their physical handicaps and/or health impairments.

TABLE 42

TEACHERS' RATINGS OF THEIR KNOWLEDGE AND UNDERSTANDING OF THE PH/HI STUDENTS (N=148)

Topic	Percentage of Teachers Who Gave Rating		
	Excellent/Good	Mediocre	Poor/Very Poor
Ability to communicate	98%	2%	-
Ability to ambulate	98%	2%	-
Toileting needs	94%	3%	3%
Ability to participate in physical activities	87%	8%	5%
School history	78%	16%	6%
Physical education needs	76%	10%	14%
Nature of physical handicap and/or health impairment	55%	26%	19%
Therapy needs	50%	16%	34%
Medical needs	47%	25%	28%
Medical history	34%	36%	30%
Family history	31%	28%	41%

As indicated in Table 43, the teachers obtained whatever knowledge and understanding they had from a wide variety of sources; the parents and school nurses were mentioned most frequently.

Table 44 lists the responses of 53% of the teachers who said they wanted to obtain more knowledge and understanding of the students. It is interesting to note that discussions with families and nurses fall near the top of the list of

TABLE 43

TEACHERS' SOURCES OF KNOWLEDGE AND UNDERSTANDING ABOUT PH/HI STUDENTS (N=148)

Source	Percentage of Teachers*
Parents/guardians	61%
School nurse	53%
O.S.R.'s	36%
PH/HI student	32%
Previous teacher(s)/school	20%
Observation of child	19%
Principal/Vice-Principal	13%
Other teachers in school	5%
Personal experience	5%
Pamphlets/brochures	4%
Personal reading	4%
Training/education	3%
Psychiatrist	3%
Doctor	3%
Physical education teacher	3%
Past experience with similar children	3%
Media	3%
Consultant	3%
Social worker	2%
Teacher's doctor	2%
Child's sibling(s)	2%
Hospital for Sick Children	1%
Guidance counsellor	1%
Sunny View personnel	1/2%
Health teacher	1/2%
Ontario Crippled Children's Centre	1/2%
Other	5%

* Several teachers gave more than one response.

TABLE 44

WAYS TEACHERS WOULD LIKE TO OBTAIN MORE KNOWLEDGE AND UNDERSTANDING OF THE PH/HI STUDENTS (N=78)

Way	Percentage of Teachers*
Written/published information	26%
Discussions with family	26%
Discussions with doctor	24%
Medical records/history	24%
Discussions with nurse	21%
Health services/medical services/clinics	8%
School Board	4%
Therapists	3%
Consultants	3%
Hospital for Sick Children	3%
In-service	3%
Seminars	3%
Films	3%
Psychological tests	3%
Principal	1%
Social Worker	1%
Professional Development Day	1%
Wants information at beginning of year	5%
Wants release time to visit family	3%
Annual information from PH/HI medicals	1/2%

* Several teachers gave more than one response.

desirable ways. Written or published information would also be welcome. Probably the most interesting theme in this table is that some teachers would like information from medical records, doctors or nurses; that information is, however, considered confidential and is not readily available to teachers unless parents give permission for it to be released.

Summary

Teachers tend to feel least knowledgeable about the PH/HI students in the areas of medical/therapy needs and history, family history, and nature of physical handicaps and health impairments. It is not surprising then that many favor discussions with families, doctors and nurses as ways of improving their knowledge. Some teachers would like information from medical records. Teachers don't seem to get a lot of information from published materials and several would like it.

Principals' Feelings about Students

A full account of the principals/vice-principals' feelings about having physically handicapped and health impaired students in their schools is given in Table 45. As the reader can see, many of the comments are of a positive nature. However, some principals expressed concerns mostly related to severely afflicted children and the physical layout and facilities of the schools.

TABLE 45

PRINCIPALS/VICE-PRINCIPALS' FEELINGS ABOUT HAVING PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED STUDENTS IN THEIR SCHOOLS
(N=64)

Feelings	Number of Principals/Vice-Principals Who Gave Response*
Very positive/favor integration	17
Good for other children/staff/community	12
No bother/no problems	12
Within limits according to facilities	12
Very good/working out well	11
Good for PH/HI children	8
Our job is to accommodate all	8
Fine	6
Depends on degree of PH/HI	4
May be a limit to number of PH/HI children in a school	3
Treated same as others	2
Problem if parents refuse to share medical information	2
With certain adjustments	2
Only if best for child	2
Very accustomed to PH/HI children	2
Difficult for immobile children	2
Severely handicapped need separate setting	2
No reservations	1
Reflects society realistically	1
Adds to school program	1
Physical layout of school is poor	1
Physical layout of school is good	1
Initially had some misgivings	1
Good relationship with parents helps	1
Humanizing effect	1
Concerned about added responsibility	1
Must be able to monitor properly	1
Must work on students' attitudes	1

* Several principals/vice-principals gave more than one response.

Teachers' and Principals' Training, Experience and Competence

Teachers' Training

Most of the teachers (88% of 137) reported that they had had no professional training in the education of physically handicapped and/or health impaired children; half of these said they would like to obtain such training. Of the 59 teachers who felt they would like some training, 35 mentioned that in-service would be a good way to obtain it. They also mentioned a wide variety of other ways such as workshops, courses (after-hours, summer, Faculty of Education, Ministry, special education, school board, non-credit, free, whole year, etc.), P.D. days, observing in a school with handicapped children or practical work with them, help from consultants, seminars, help from the Red Cross, etc.

The remaining 16 teachers were most likely to have received their training in the form of special education courses or graduate courses from the Faculty of Education, Ministry of Education, University of Pittsburgh, York University or the Ontario Institute for Studies in Education (O.I.S.E.). Half of the sessions involved the equivalent of one to four weeks of work, 25% involved five to eight weeks and 25% over eight weeks. None of the sessions were rated by the teachers as being of poor quality. The content of the sessions covered a broad spectrum of topics as illustrated by the following list which is arranged from the topics which were most frequently covered to those least frequently covered.

- -Characteristics and causes of physical handicaps and/or health conditions.
- -Treatment procedures/special services for physical handicaps and/or health conditions.
- -How to diagnose or identify handicapped students' social/emotional problems and needs.
- -How to deal with social/emotional problems.
- -Appropriate instructional techniques.
- -Appropriate programs/curriculum (e.g., individual, remedial).
- -How to diagnose or identify handicapped students' individual academic strengths and weaknesses.
- -Appropriate evaluation methods.
- -Experience or actual contact with physically handicapped and/or health impaired students.
- -Appropriate instructional materials.
- -Appropriate counselling methods for students and/or their parents.
- -Ways of identifying and dealing with negative attitudes toward handicapped students within yourself.
- -Ways of dealing with negative attitudes toward handicapped students within other students.
- -How to deal with emergency situations (fire, seizures, etc.)
- -Mechanical/electronic devices available for these students.
- -How to provide a safe, comfortable environment.
- -Appropriate physical activities.

Teachers' Experience

Of 148 teachers, 64% reported they had had previous experiences in educating physically handicapped and/or health impaired students while 53% said they had had personal experiences outside of school or the field of education. Table 46 is a detailed record of their elaborations to these questions.

Teachers' Competence

During the interview, the teachers were presented with a card on which were listed sixteen topics related to the education of PH/HI students and asked to rate themselves in terms of how well informed and competent they felt in each area. The percentages of those who rated themselves "above average" in each area are given in Table 47. The teachers felt most competent about dealing with negative attitudes within themselves and other students. They felt least competent about mechanical/electronic devices, treatment procedures and special services, physical activities, and characteristics and causes of handicaps and/or health conditions.

Principals' Training

Most of the principals or vice-principals (80% of 64) reported that they had had no professional training in the education of physically handicapped and/or health impaired children; just over half of these said they would like to obtain such training. Of the 27 principals/vice-principals who felt they would like some training, 11 mentioned that

TABLE 46

TYPES OF PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS WITH WHICH TEACHERS HAVE HAD EDUCATIONAL AND PERSONAL, NON-EDUCATIONAL EXPERIENCES (N=148)

Physical Handicap or Health Impairment	Number of Teachers With Educational Experiences*	Number of Teachers With Personal, Non-educational Experiences*
Deafness/Hearing impairment	25	5
Epilepsy	23	5
Blindness/Visual impairment	15	4
Asthma/Respiratory problems	12	4
Cerebral palsy	9	5
Heart problems/disease	9	3
Allergies	6	1
Paralysis	6	-
Amputee	6	6
Cancer/leukemia	5	3
Brain damage	5	-
Speech impairment/Cleft palate	5	1
Seizures	4	-
Braces/crutches	4	-
Scoliosis	4	2
Diabetes	3	6
Kidney disease	3	1
Hemophilia	3	-
Hip disorder	3	-
Hand/foot deformity	3	-
Facial disfigurement	3	-
Anemia	2	-
Colostomy	2	-
Polio	2	5
Toileting problem	2	-
Malnutrition	1	1
Brain tumour	1	
Thyroid problem	1	-

TABLE 46 (Cont'd)

TYPES OF PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS WITH WHICH TEACHERS HAVE HAD EDUCATIONAL AND PERSONAL, NON-EDUCATIONAL EXPERIENCES (N=148)

Physical Handicap or Health Impairment	Number of Teachers With Educational Experiences*	Number of Teachers With Personal, Non-educational Experiences*
Leukemia	1	–
Mobility limitations/wheelchair	1	12
Cystic fibrosis	1	–
Shunt	1	–
Spina bifida	1	–
Chronic case	–	1
Back problems	–	1
Parkinson's disease	–	3
Paraplegia/quadriplegia	–	5
Muscular distrophy	–	1
Bone malformation	–	1
Multiple sclerosis	–	4
Meniere's syndrome	–	1
Migraine headaches	–	1
Muscle dysfunction	–	1
Tuberculosis	–	2
Other Experiences		
Hospital/institution teaching	2	–
Sunny View/Ontario Crippled Children's Centre	2	5
Bloorview School	1	–
Home instruction	1	–
Health class	2	–
Teacher has physical handicap/health impairment	–	3
Swimming courses	–	1

(Cont'd)

TABLE 46 (Cont'd)

TYPES OF PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS WITH WHICH TEACHERS HAVE HAD EDUCATIONAL AND PERSONAL, NON-EDUCATIONAL EXPERIENCES (N=148)

Physical Handicap or Health Impairment	Number of Teachers With Educational Experiences*	Number of Teachers With Personal, Non-educational Experiences*
Extend-a-Family	-	1
Teacher has PH/HI child	-	1
Camp counsellor at PH camp	-	4
St. John's ambulance service	-	2
Medical clinic in orphanage	-	1
Volunteer work	-	3

* Several teachers gave more than one response.

TABLE 47

TEACHERS' AND PRINCIPALS' SELF-RATINGS OF HOW WELL INFORMED AND COMPETENT THEY ARE IN EDUCATING PH/HI CHILDREN

Topic	Percentage of Teachers Who Rated Themselves Above Average (A or B) (N=148)	Percentage of Principals Who Rated Themselves Above Average (A or B) (N=64)
Ways of identifying and dealing with negative attitudes toward handicapped students within yourself...	81%	84%
Ways of dealing with negative attitudes toward handicapped students within other students..............	76%	78%
How to deal with social/emotional problems...............	52%	53%
How to diagnose or identify handicapped students' individual academic strengths and weaknesses............	51%	44%
Appropriate programs/curriculum (e.g., individual, remedial)..	51%	50%
How to provide a safe, comfortable environment...........	49%	66%
How to deal with emergency situations (fire, seizures, etc.)...	49%	64%
Appropriate evaluation methods...........................	42%	41%
Appropriate counselling methods for students and/or their parents..	40%	59%
Appropriate instructional techniques.....................	38%	42%
Appropriate instructional materials......................	38%	38%
How to diagnose or identify handicapped students' social/emotional problems and needs..............................	35%	39%
Characteristics and causes of physical handicaps and/or health conditions..	29%	31%

(Cont'd)

TABLE 47 (Cont'd)

TEACHERS' AND PRINCIPALS' SELF-RATINGS OF HOW WELL INFORMED AND COMPETENT THEY ARE IN EDUCATING PH/HI CHILDREN

Topic	Percentage of Teachers Who Rated Themselves Above Average (A or B) (N=148)	Percentage of Principals Who Rated Themselves Above Average (A or B) (N=64)
Appropriate physical activities......................	21%	38%
Treatment procedures/special services for physical handicaps and/or health conditions..................	13%	25%
Mechanical/electronic devices available for these students..	8%	14%

in-service would be a good way to obtain it. They also mentioned workshops, courses, after-school programs, leaves of absence, work experience in hospitals, etc. Several of the principals/vice-principals qualified their remarks about needing more training by commenting on the small number of physically handicapped students in the system; they felt that if more were to be integrated, the need for training would increase.

The remaining 13 principals/vice-principals had received their training in the form of courses (summer, graduate, undergraduate, special education). One had received training at a convention on exceptional children and another had a certificate in Bliss Communication. The places of training they named were the Ministry of Education (5), O.I.S.E. (4), The Institute of Child Study (3), the Toronto Board of Education (2), Columbia University (1), the Ontario Crippled Children's Centre(1), the Council of Exceptional Children (1), Syracuse (1), and the University of Western Ontario (1). Half of the sessions involved the equivalent of one to four weeks of work, 25% involved five to eight weeks and 25% over eight weeks. Only one session was rated as being of poor quality. As with the teachers, the content of the sessions covered a broad spectrum of topics as illustrated by the following list which is arranged from the topics which were most frequently covered to those least frequently covered:

-Appropriate instructional techniques.

-Appropriate instructional materials.

-Characteristics and causes of physical handicaps and/or health conditions.

-How to diagnose or identify handicapped students' individual academic strengths and weaknesses.

-How to diagnose or identify handicapped students' social/emotional problems and needs.

-Treatment procedures/special services for physical handicaps and/or health conditions.

-Appropriate programs/curriculum (e.g., individual, remedial).

-Appropriate physical activities.

-Appropriate counselling methods for students and/or their parents.

-Ways of dealing with negative attitudes toward handicapped students within other students.

-Appropriate evaluation methods.

-Ways of identifying and dealing with negative attitudes toward handicapped students within yourself.

-How to deal with emergency situations (fire, seizures, etc.).

-How to deal with social/emotional problems.

-Experience or actual contact with physically handicapped and/or health impaired students.

-How to provide a safe, comfortable environment.

-Mechanical/electronic devices available for these students.

Of the 13 principals/vice-principals who had received training, 10 said they felt they should have more knowledge and understanding.

Principals' Experience

Of 64 principals/vice-principals, 91% reported they had had previous experiences in educating physically handicapped and/or health impaired students, while 83% said they had had personal experiences outside of school or the field of education. Table 48 is a detailed record of their elaborations.

Principals' Competence

During the interview, the principals/vice-principals were presented with the same card as the teachers and asked to rate themselves in terms of how well informed and competent they felt in each of 16 areas. The percentages of those who rated themselves "above average" in each area are also given in Table 47. Higher percentages of the principals rated themselves "above average" on many of the topics than did the teachers although the areas of strength and weakness were very similar for the two groups. The principals/vice-principals felt most competent with respect to negative attitudes in themselves and other students and least competent in the areas of treatment procedures, special services and electronic/ mechanical devices.

Parents' Opinions

Just over half (53%) of the 78 parents who were interviewed felt that the school principals and teachers are professionally prepared and competent to meet the needs of their children. Several were uncertain and 27% answered "NO" to the question. Many of those who responded in the

TABLE 48

TYPES OF PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS WITH WHICH PRINCIPALS/VICE-PRINCIPALS HAVE HAD EDUCATIONAL AND PERSONAL, NON-EDUCATIONAL EXPERIENCES

(N=64)

Physical Handicap or Health Impairment	Number of Principals/Vice-Principals With Educational Experiences*	Number With Personal Non-educational Experiences*
Blind/vision impaired	17	5
Epilepsy	12	4
Deaf/hearing impaired	11	2
Braces/crutches	6	-
Asthma/respiratory diseases	5	4
Wheelchair cases	4	4
Polio	3	3
Heart disorders	3	2
Malformed limb	3	-
Quadriplegia/paraplegia	3	7
Spina bifida	2	-
Speech defects	2	-
Thalidomide	1	-
Cancer	1	1
Cerebral palsy	1	2
Rubella syndrome	1	-
Dwarfism	1	-
Severe burns	1	-
Terminal illness	1	-
Brain Damage	1	2
Perthe's disease	1	-
Multiple sclerosis	1	4
Incontinence	1	-
Seizures	1	-
Gastric problems	1	-
Premature aging condition	1	-
Amputee/missing limbs	1	4
Harelip/cleft palate	-	1
Stroke	-	1

TABLE 48 (Cont'd)

TYPES OF PHYSICAL HANDICAPS AND HEALTH IMPAIRMENTS WITH WHICH PRINCIPALS/VICE-PRINCIPALS HAVE HAD EDUCATIONAL AND PERSONAL, NON-EDUCATIONAL EXPERIENCES

(N=64)

Physical Handicap or Health Impairment	Number of Principals/Vice-Principals With Educational Experiences*	Number With Personal Non-educational Experiences*
Arthritis	-	1
Rheumatic heart	-	1
Psoriasis	-	1
Diabetes	-	1
Senility syndrome	-	1
Tuberculosis	-	2
Hydrocephalus	-	1
Other physical handicaps	11	11
Other health problems	7	-
Other Experiences		
Health classes	6	-
Visits (Sunny View, Bloorview, H.S.C., O.C.C.C., etc.)	5	1
Principal (Sunny View, Hospitals & Institutions, etc.)	3	-
Home Instruction	1	-
Joint programs with Sunny View, etc.	1	-
Volunteer work	-	7
Scouting Association	-	4
Camps, clubs, etc.	-	5
CNIB	-	1

* Some principals/vice-principals gave more than one response.

negative felt the school staff don't understand the students' medical and physical problems and needs; others said teachers and principals lack the proper education and equipment to deal with PH/HI students; two talked of fear and hysteria on the part of school personnel; two talked of unawareness; three mentioned lack of empathy; one said school authorities disagree with family physicians about physical education; and one said age differences are not considered.

However, considerably more of the parents (83%) considered school personnel to be supportive of their children.

Summary

The vast majority of the teachers and principals/ vice-principals interviewed for this study had had no professional training in the education of physically handicapped and health impaired children; approximately half of whom would like training, particularly if more PH/HI children were to be integrated. In-service seems to be the most highly favored means of obtaining such training.

The principals were more likely to have had various educational and non-educational experiences with handicapped and health impaired persons than the teachers (91% versus 64% and 83% versus 53%) and were more likely to rate themselves as knowledgeable and competent in the area.

Both teachers and principals rated themselves as fairly competent in dealing with negative attitudes towards handicapped children in themselves and other children.

Both teachers and principals rated themselves as relatively incompetent in the areas of mechanical/electronic devices, treatment procedures and special services, appropriate physical activities, and characteristics and causes of physical handicaps and/or health conditions.

Some parents also felt the teachers and principals were weak in their understanding of the students' medical and physical needs and that they lacked the proper equipment and education.

Effects on Other Students

The 148 teachers were asked in the interview (1) if the amount of time they spend on other students is reduced as a result of having the PH/HI children in their classes, and (2) whether the PH/HI students create problems for the other students. For both questions, 90% of the teachers said "NO". The teachers who said "YES" most frequently talked of the PH/HI children's learning, emotional and/or behavioral problems.

The teachers were also asked whether the presence of the PH/HI students helps the other students become more understanding and tolerant of individual differences; 37% said "YES", 53% said "NO" and the remainder did not know. Many who said "YES" spoke of the other children developing a greater awareness of such problems. Of those who said "NO", few made negative elaborations but most said the attitudes of the other students were not affected because they were either unaware of the PH/HI children's health problems or could see no real difference in the children.

Summary

For the most part, it seems that the PH/HI children have little effect on other students in the same classrooms; teacher time is not usually reduced for them and problems are minimal. Some children may develop a greater understanding and tolerance of individual differences as a result of attending the same classes as PH/HI children.

Long-Term Plans

Teachers' Opinions

Almost half (46% of 148) of the teachers reported that long-term plans were not being made for the PH/HI students' secondary education. Several teachers said it was too early to make such plans while many others said that the PH/HI children were no different from the regular children and were thus getting the same consideration (which in this case meant no planning). Another 17% of the teachers said they didn't know if plans were being made.

The remaining 37% of the teachers talked of the following kinds of plans being made for the children's secondary education (some teachers gave more than one response):

-Plans same as regular students (18 teachers)
-Going to a regular school (12)
-Looking for most suitable school (8)
-Teacher-parent discussions (7)
-Plans also being made for university (4)
-Will be tested for vocational school (3)
-Considering special education in Junior High (2)
-Transfer to private school (2)
-Choosing collegiate close to home (1)
-Discussions with senior school (1)
-Teacher preparing student (1)
-Social worker made recommendation (1)
-Parents want university/child can't do work (1)
-Skills training (1)
-High school not able to accommodate student (1)
-Teacher made recommendation, parent disagreed (1)

Parents' Opinions

Of the 78 parents/guardians interviewed, 72% said school personnel were not helping them make long term plans for their children's secondary education, 91% said "NO" for post-secondary education and 91% said "NO" for vocational/occupational training. Some of the parents felt that it was too early or not appropriate to make such plans. A few mentioned that the school has no such service; a few talked of poor home/school communication; a couple had not thought of it; and a couple said that the school is concerned with more immediate problems. Many parents chose not to elaborate.

Several parents talked of discussions with school personnel about secondary school plans and a few had talked to the Coordinator of Special Programs (Physically Handicapped). One parent mentioned a slide presentation of various high schools and another talked of certain written information.

Summary

For the majority of the PH/HI students, no plans had been made for their future education although only a few teachers and parents expressed concern or worry over the state of affairs.

Class Size and Composition

Class Size

Table 49 shows the number of teachers of PH/HI children who had various class sizes. Nearly 70% of the teachers had class sizes over "25". The small classes are the special education classes.

TABLE 49

TEACHERS' CLASS SIZES AND ABILITY TO ACCOMMODATE PH/HI STUDENTS (N=147)

Class Size	No. of Teachers With Class Size	No. Who Believe Class Too Large to Accommodate PH/HI Student
6 - 10	13	1
11 - 15	12	2
16 - 20	4	0
21 - 25	17	5
26 - 30	53	8
31 - 35	46	9
36 - 40	2	0
TOTAL	147	25 (17%)

Teachers' opinions. The teachers were asked if the sizes of their classes were too large to accommodate the PH/HI children; 83% said "NO" (the responses are broken down by class size in Table 49). However, it should be noted that 13 teachers felt the class size was too large for all students even though they felt they could accommodate the PH/HI children.

The teachers who felt the classes were too large gave the following elaborations (some teachers gave more than one response):

-Small class would help child who needs 1-to-1 help (11 teachers)
-Smaller class needed for all (9)
-Room too crowded with furniture for PH child (2)
-Child has behavior problems (2)
-Child has emotional problems (2)
-Composition of class is wrong (1)
-Child has no intellectual challenge (1)

Parents' opinions. Of the 78 parents/guardians interviewed, 25 (32%) felt that the size of their child's class was too large to meet his/her needs. They frequently spoke of wanting more individual attention for their children and several felt the class was too large for all the students.

Principals' opinions. The principals were asked if the classes in their schools were too large to accommodate the PH/HI students; 80% said "NO". Their elaborations were similar to those of the teachers.

Class Composition

Teachers' opinions. The teachers were asked, "Does your class contain too many students with special needs to accommodate this student?" - 85% said "NO," although some added that they just had too many students with special needs.

Principals' opinions. The principals were asked, "Does your school contain too many students with special needs?" - 80% said "NO".

Summary

According to at least 80% of both teachers and principals, class size and class composition do not seriously limit the ability of the schools to accommodate the PH/HI students.

Approximately one-third of the parents, however, felt that classes were too large to meet the needs of their children.

Individualization

Teachers' Opinions

Of the 148 teachers interviewed, 98 (66%) said they did not have individualized programs for the PH/HI children; however, 85 of the 98 said the children did not need one.

Most of the other teachers said the PH/HI students in their classrooms had mostly individualized programs which are continually reviewed. They described the individualization as follows (some teachers gave more than one description):

- -Mathematics (23 teachers)
- -Reading (22)
- -Special education - full time (7)
- -Working at own level in all areas (6)
- -All students have individualized program (6)
- -Evaluation (6)
- -Writing (5)
- -Language (4)
- -Spelling (3)
- -Special education - part time (2)
- -Project work (2)
- -Art (2)
- -Speech (2)
- -Repetition/drill (1)
- -Small muscle movement (1)
- -Emotional problems (1)
- -Lessons in small steps (1)
- -Science supplement (1)
- -Teacher's extra time (1)
- -Social studies (1)
- -Science (1)
- -English (1)
- -Gym (1)
- -French (1)
- -Structured program (1)

Parents' Opinions

Of 78 parents/guardians, 13 said their children had an individualized program at school and 8 were satisfied with the program.

Of the remaining 65 parents, 16 felt their children needed an individualized program which they weren't getting.

Summary

According to the teachers, approximately 33% of the PH/HI students have a mostly individualized school program - mathematics and reading are the two areas most likely to be individualized. Some parents may not be aware that their children are receiving such individual attention.

A few more children may need individualization.

Problems Created for Teachers and Principals

Teachers' Opinions

Of 148 teachers, 81% said that the presence of the PH/HI students in their classrooms did not create problems for them as teachers. The remaining teachers listed the following problems (some teachers listed more than one problem):

- Behavior problems (6 teachers)
- Needs individual academic attention (4)
- Needs special attention (2)
- Emotional problems (2)
- Child too distracting, noisy (2)
- Child does not co-operate (2)
- Difficulties in physical education (2)
- Demands more time than teacher can give (2)
- Others don't want to associate with child (2)
- Has exhausted resources (1)
- Needs special program (teacher lacks experience) (1)
- Have to referee arguments (1)
- Parents complain about child's marks (1)
- Others victimize child (1)
- Resists anything new (1)
- Communication problem (1)
- Destroys property, books, etc. (1)
- Can't give child more (1)

The 148 teachers were also asked if they had enough time to prepare proper programs for the PH/HI students; 81% said "YES."

Principals' Opinions

Of 64 principals/vice-principals, 91% said that the presence of the PH/HI students in their schools did not create problems for them as administrators. The remainder listed the following problems:

- Extra time needed to meet with nurse, teacher, etc. (2)
- Extra time to meet with parents (1)

-Problems related to transportation (1)
-Must be aware of what PH student's class is doing (1)

The 64 principals/vice-principals were also asked if they had enough administrative time to manage the requirements of the PH/HI students; 89% said "YES."

Summary

On the whole, the teachers and principals feel they have enough time for the PH/HI students and that they do not create too many problems. Problems which do exist are quite varied in nature.

Effects on School Program/Curriculum

Teachers' Opinions

Nearly all the teachers (95% of 148) said that the presence of the PH/HI children in their classrooms was not a detriment to the existing program/curriculum activities. The remainder listed special arrangements for field trips, behavior problems and requirements for extra teacher time as detriments.

Principals' Opinions

A very similar percentage of the principals/vice-principals (94% of 64) also felt that the presence of the PH/HI children in their schools was not a detriment to the existing program/ curriculum/groupings. They elaborated as follows:

-Treated as other students (17 principals/

vice-principals)
- Not visibly handicapped/no serious physical handicap (14)
- They boost morale (3)
- Good to have them (2)
- A good student/asset to school (2)
- They do everything but contact sports (1)
- They participate to best of ability (1)
- We are prepared for students with special problems (1)
- Not many PH/HI children in school (1)

Summary

According to the teachers and principals, the PH/HI students have few detrimental effects on the program and curriculum.

Roles of Other School Professionals

Teachers' Opinions

The 148 teachers were asked, "Are consultants who have training in several exceptionalities readily available to help you meet the needs of this student?" Several teachers (42%) did not know, 44% said "YES" and the rest said "NO."

Of 148 teachers, 22 reported that they had used such consultants and 9 of those who said there were no consultants reported they needed one.

Others reported they had not used consultants because they did not need them, five said the child was moving to special education, three said they didn't know how to contact the consultants and one said that the nurse had helped.

Parents' Opinions

The 78 parents were asked, "Is your child receiving the help of consultants and/or curriculum specialists in the school?" Their answers were:

YES	(8)
NO	(66)
DON'T KNOW	(4)

Of those who said "YES," 2 were not satisifed with the help.

Of those who said "NO," 21 wanted help for their children such as:

- -Individualized program (8)
- -Help with reading (7)

-Academic help (7)
-A modified program (1)
-French consultant (1)
-Specialized teachers (1)
-Help with writing (1)

The parents were asked, "Has your child been assessed or diagnosed by school professionals (e.g., teachers, psychologists, social workers)? Their answers to this question were:

YES (32)
NO (37)
DON'T KNOW/NO ANSWER (9)

Of those who said "YES," 18 were satisfied with the methods and 19 were satisfied with the results. They elaborated with the following comments:

-Impressed with resources used (2 parents)
-School co-operated with Crippled Children's Centre (1)
-Tests well explained by professionals (1)
-Student is progressing (1)
-Student got individual help (7)
-Student got into special education (4)
-Parent and school agreed on results (3)
-Student has improved since then (2)
-Student got remedial help (2)
-Student will be placed in regular class (1)
-Student treated like normal child now (1)
-Student allowed to remain in regular school (1)
-Student was given a guidance counsellor (1)

Those parents who were not satisfied with the methods and results of assessments and diagnoses by school professionals elaborated as follows:

-Parent disagreed with psychologist's assessment (4)
-Parents didn't know about tests until long after (1)
-Test methods upset student (1)
-Psychologist not there to interpret tests (1)

-Done by another Board (1)
-Student did not receive special help parent desired (4)
-Proper program not available (3)
-Parents unable to communicate with school personnel and professionals (1)
-Parent did not understand report (1)
-Parents rejected school's assessment (1)

Of the 37 parents who said their children had not been assessed or diagnosed, 9 wanted it to be done.

And finally, the parents were asked the question, "Is your child receiving support/help from doctors, psychologists, therapists, etc. while in school?" The responses of the 78 parents were:

YES (8)
NO (68)
DON'T KNOW/NO ANSWER (2)

The 8 parents who said "YES" all said they were satisfied with the support and help and described it as follows:

-Psychological assessments/interviews (3)
-Supportive/empathetic (2)
-Clinic help (1)
-School nurse is helpful/supportive (1)

Of the 68 parents who said their children were not receiving such professional support/help, 20 felt their children needed it; they elaborated as follows:

-Student should have continual support/help (6)
-Speech therapy (5)
-Guidance from a school psychologist (4)
-Physiotherapy (4)
-Help in socialization (3)
-Help because of single parent situation (1)
-Parent wants feedback regarding student's social and academic skills (1)

Summary

The Toronto Board of Education employs many consultants and co-ordinators in the Special Education Department who have a wide variety of skills and training in meeting the needs of exceptional children - there are experts in behavior, learning disabilities, communication, and physical handicaps to name just a few. The Board also employs a large number of social workers and psychologists as well as four psychiatrists in the Student Services Department. Furthermore, nurses and doctors of the Department of Public Health are available for consultation with respect to health problems. Many curriculum consultants and specialists are available. It is thus a little surprising that such a high percentage (approximately 56%) of the teachers do not seem to know consultants exist and/or do not believe that they are readily available.

According to the parents, very few children were receiving the help of consultants, curriculum specialists, doctors, therapists, psychologists, etc. while in school. However, several parents felt their children needed such help. The parents of those few PH/HI children who were getting special help were mostly satisfied.

On the other hand, more parents reported that their children had been diagnosed or assessed by school professionals - approximately 40% of whom reported some form of dissatisfaction with the methods and/or results.

Staff Co-ordination

Teachers' Opinions

The 148 teachers were asked two questions about staff co-ordination; the first was, "Is there a co-ordinated effort between you and members of the administration of this school to meet the needs of this student?" They answered as follows:

Yes (53%)

- -Support from principal/vice-principal (24)
- -Informal co-ordination (17)
- -Same as for other students (14)
- -Regular reviews (12)
- -About academic needs (7)
- -Parent/administration/teacher communication (7)
- -Considered child's placement/program (6)
- -About transportation (3)
- -About physical education (3)
- -About behavior problems (3)
- -Nurse also involved (3)
- -About toileting (2)
- -Social worker also involved (2)
- -Psychologist also involved (1)
- -About absenteeism (1)
- -About medication (1)
- -About communicable diseases (1)
- -About testing (1)
- -About habitual tardiness (1)
- -Obtained special teacher for child (1)

No (47%)

- -No need/would be if needed (50)
- -Same as for all students (4)
- -No real involvement with administration (2)
- -Help not available from administration (2)
- -Support comes from Special Education Co-ordinator (2)
- -Administration does not support teacher (1)
- -Administration not aware of physical handicap (1)
- -Never discuss physical handicap as it is not on school record (1)

The second question was, "Is there a co-ordinated effort between the regular teachers and the special education teachers in this school to meet the needs of this student?" The responses were as follows (a few did not answer and a couple of schools had no special education teachers):

Yes (20%)

- -Child attends both types of classes (14)
- -Informal co-ordination (7)
- -Excellent communication (4)
- -Discuss progress of child (3)
- -Discuss needs of child (3)
- -Regular assessments (2)
- -About programs (2)
- -Itinerant program (1)
- -Guidance/advice from special education teacher (1)

No (75%)

- -Not needed/child does not attend special education classes (95)
- -Not needed (8)
- -Not needed/child does not attend regular classes (7)
- -Lack of time (2)
- -Teacher not sufficiently informed about child's problems to inform others (1)
- -Child needs special education, but parent resisting suggestion (1)

Summary

On the whole, teachers seem satisfied with the co-ordination between themselves and administration and between regular teachers and special education teachers in meeting the needs of the PH/HI children. In cases where they reported no co-ordination, they usually felt it was not needed.

Evaluation and Reporting

Parents' Opinions

The majority of the parents (68% of 78) said they were satisfied with the schools' evaluation and reporting procedures. The remainder listed the following dissatisfactions:

- -Need closer parent/teacher relationship (9)
- -More detail needed (5)
- -Lack of understanding of student's problems makes evaluation unsuitable (4)
- -Reports should be typed (3)
- -Numerical marking system needed (2)
- -Reports are contradictory (1)
- -Child should not be marked against class average (1)
- -Parent would like anecdotal report (1)
- -School should have homework (1)
- -Itinerant teachers should give special report (1)
- -Parent wants written record as opposed to verbal (1)
- -Only children with problems get attention (1)

Parents' Involvement with School

Parents' Opinions

According to 90% of the parents, the schools encourage them to visit; in fact, over half of the parents had visited the schools in the school year of this study (up to the time of the interview in the spring of 1981) more than two times. Table 50 provides more detail. Most of the parents (78%) also reported that they felt free to challenge decisions which the school personnel make related to their children (14% said "NO" and 8% did not know).

However, several parents (31%) felt they did not have enough say in planning and reviewing their children's school programs.

TABLE 50

NUMBER OF SCHOOL VISITS BY PARENTS FROM SEPTEMBER 1980 TO SPRING 1981
(N=78)

Number of Visits	Number of Parents
0	5
1	9
2	21
3	15
4	13
5	4
6	5
9	2
10	1
12	2
30	1

TOTAL VISITS = 280
AVERAGE VISITS = 3.6

Previous Placement

The first question on the Principal Interview Schedule was designed to determine where the PH/HI students had been before their placement (defined as integrated) during the time of this study. The reader should recall that for the purposes of this study in the Board of Education for the City of Toronto, integration was defined as placement in regular classes or the following special education classes:

- -Self-Contained Special Programs (Behavioral; Learning Disabilities; Primary, Junior, Senior; and Reading).
- -Withdrawal Special Programs (Behavioral; Gifted and Enrichment; Learning Centre; Learning Disabilities; Primary, Junior, Senior; Reading Clinic; Hearing; and Speech).

Of the 155 PH/HI children identified as eligible for this study, the principals supplied information on previous placement for 141 children as follows:

- -A regular or special education class (defined as integrated) in another Toronto school (68)
- -A regular or special education class (defined as integrated) in the same school (45)
- -A regular or special education class (defined as integrated) in a Canadian school outside Toronto (15)
- -An educational setting outside Canada (Guyana, Cyprus, Vietnam, South America) (4)
- -Ontario Crippled Children's Centre (defined as segregated) (3)
- -Metro-wide Special Program (Health) (defined as segregated) (2)

-Metro-wide Special Program (Language)
(defined as segregated) (1)

-Sunny View (defined as segregated) (1)

-Toronto Special Program
(Home Instruction) (defined as segregated) (1)

-A school for the retarded
(defined as segregated) (1)

According to these data, then, very few (6%) of the PH/HI children had directly transferred from a placement defined as segregated to their placement at the time of this study defined as integrated.

Present Placement

The placements of 152 of 155 students identified as eligible for the study were as follows (all are defined as integrated - see preceding section):

-grade three (10)
-grade four (25)
-grade five (24)
-grade six (20)
-grade seven (19)
-grade eight (28)
-Special Program (Senior) (8)
-Special Program (Junior) (4)
-Special Program (Primary) (4)
-Special Program (Nongrouped) (Junior) (3)
-Special Program (Perceptual) (Junior) (1)
-Special Program (Perceptual) (Senior) (1)
-Special Program (Perceptual Resource) (Senior) (1)
-Special Program (Learning Centre) (Junior) (1)
-Special Program (Behavioral) (Junior) (1)
-Special Program (Behavioral) (Senior) (1)
-Special Program (New Canadian) (1)

These data thus show that the majority (83%) of the PH/HI children were attending regular classes at the time of this study.

Transfer, Enrolment and Placement Procedures

Principals/Vice-Principals' Opinions

The principals/vice-principals were asked to describe procedures, changes, preparations and/or problems associated with the transfer of PH/HI students to their integrated placements examined by this study. Of 155 PH/HI students eligible for the study, the principals talked about 143 and reported that 98 had transferred. (Many transfers were from a junior to a senior elementary school.)

The principals/vice-principals' responses are recorded in Tables 51, 52 and 53. A few respondents had difficulty in answering the questions in this section because they were not present when the students transferred; therefore, the percentages which are shown may not be exact and the reader is advised to pay more attention to the general trends shown in the tables.

The reader should also keep in mind while examining the information in these tables that very few of the PH/HI students were rated as severely handicapped and that very few had transferred directly from segregated settings.

Teachers' Opinions

The teachers were asked two very specific questions about preparation for PH/HI students; they were asked if anything had been done to help other students "affectively" and "cognitively" understand the PH/HI students. Approximately 30% replied "YES" to affective preparation and 26% replied "YES" to cognitive preparation - details are provided in Tables 54 and 55. Many teachers who reported no such preparations felt that it was unnecessary because other students were not aware of the child's problem or because the affliction was no problem in the school environment. A few other teachers were reluctant to engage in such activities because the parents and/or child did not want others to find out or know a lot about the condition. A few felt it might be an invasion of privacy, a few were afraid it might embarrass the PH/HI children or single them out and a few said the other children were too young and/or wouldn't understand.

Parents' Opinions

The 78 parents were asked to describe how their PH/HI children came to be enrolled in the integrated settings they were in at the time of this study and whether they had encountered any problems during enrolment. Their descriptions of the enrolment process are tallied in Table 56. The majority described regular, smooth enrolment processes with no problems although a few felt the placements were not appropriate or were waiting for

TABLE 51

PRINCIPALS/VICE-PRINCIPALS' REPORTS OF PROCEDURES USED WHEN PH/HI STUDENTS TRANSFERRED

Procedure	Percentage of Transferred Students (N=98)
Review of records (e.g. O.S.R.'s*)	91%
Compilation of medical/social history by nurse	63%
Health assessment by nurse/doctor	52%
Pre-admission visit for student/family	44%
Consultation with parent(s)/guardian(s)	36%
Consideration by sending principal/vice-principal	34%
Consideration by sending teacher(s)	31%
Review of school building/facilities	30%
Consideration by Special Education Placement and Review Committee	26%
Consideration by guidance counsellor	24%
Consideration by special education consultant	22%
Assessment by psycho-ed consultant	20%
Consideration by therapists	15%
Involvement of interpreter	15%
Consideration by social worker	11%
Consideration by special education superintendent	7%
Review by co-ordinator of physically handicapped programs	6%
Assessment by psychiatrist	4%
Assessment by orthopedic consultant (DPH)	2%
Consideration by local superintendent	2%
Consideration by clergy	2%
Involvement with Sunny View	2%
Assessment for English (ESL)	2%
Arrangements for transportation	1%
Involvement with Crippled Children's Centre	1%

* Ontario School Records

TABLE 52

PRINCIPALS/VICE-PRINCIPALS' REPORTS OF CHANGES AND/OR PREPARATIONS MADE FOR PH/HI STUDENTS WHEN THEY TRANSFERRED

Change and/or Preparation	Percentage of Transferred Students (N=98)
[a]Cognitive preparation for principal(s)	47%
Cognitive preparation for teacher(s)	44%
Affective preparation for teacher(s)	23%
Affective preparation for principal(s)	21%
Arrangement for transportation	12%
[b]Cognitive preparation for regular students	9%
[c]Affective preparation for regular students	9%
[d]Arrangement for increased medical services	5%
Reduction of class size	4%
[e]Alteration of school building	3%
Arrangement for therapist(s)	2%
[f]Addition of orthopedic/health equipment	2%
Hiring of educational assistants	2%
Arrangements for medication	2%
In-service training for teacher(s)	1%
Arrangements regarding physical education	1%

[a] Principal briefed by parents (5)
Information from nurse (2)
Sending principal explained about prothesis (1)

[b] Teacher discussed situation with class (2)

[c] Principal spoke to students picking on PH/HI child (1)

[d] Arrangement with outside clinic (1)

[e] Ramp added (1)
Hooks for portable dialysis equipment (1)

[f] Wheelchair (1)
Use of inhalator (1)

TABLE 53

PRINCIPALS/VICE-PRINCIPALS' REPORTS OF PROBLEMS WHICH OCCURRED WHEN PH/HI CHILDREN WERE TRANSFERRED

Problem	Percentage of Transferred Students (N=98)
Transportation	3%
Social difficulties	2%
Academic difficulties	2%
Staff concerned about child's medication	1%
Child target for bullying by older students	1%
Concern about physical education restrictions	1%
Parent did not initially advise school of child's condition	1%
Child couldn't manage stairs	1%
Difficulty in getting records from outside sources	1%

TABLE 54

TYPES OF AFFECTIVE PREPARATION OF OTHER STUDENTS: TEACHERS' REPORTS

Affective Preparation	Percentage of PH/HI Students for which Preparation Done* (N=148)
Class discussion	14%
Informal talk about limitations not focused on PH/HI student	9%
Incidental explanations	4%
Teacher's attitude a model	3%
PH/HI student gave talk to class	2%
Answer students' questions	1%
Film (e.g. "I'll Find a Way")	1%
Sessions about treatment of student	1%
Discussion when student not present	1%
Program with MARCH OF DIMES (BOOST)	1%

*A few students had more than one preparation.

TABLE 55

TYPES OF COGNITIVE PREPARATION OF OTHER STUDENTS: TEACHERS' REPORTS

Cognitive Preparation	Percentage of PH/HI Students for Which Preparation Done* (N=148)
Class discussion of operation, handicap, etc.	7%
Teacher explained condition, disability, signs, symptoms, medication, etc.	5%
PH/HI student has explained	5%
Incidental explanation of affliction and limitations/informal talk	5%
On individual basis/as needed	5%
Teacher explained while child away	1%
Program with MARCH OF DIMES (BOOST)	1%

*A few students had more than one preparation.

TABLE 56

PARENTS' DESCRIPTIONS OF HOW PH/HI CHILDREN CAME TO BE ENROLLED IN THEIR PRESENT SCHOOLS/CLASSES (N=78)

Description	Percentage of Parents Who Gave Description*
Enrolment not different from a regular student	74%
Team decision of parents and school personnel	22%
Advice of school personnel; parents consented without participating	4%
Enrolment in regular class because Special Education class/program not available	3%
Enrolment in regular class because Special Education class/program already filled	3%
Enrolment in special class pending assessment	3%
School system doesn't know where to place student	3%
Enrolment in regular class pending assessment or diagnosis	1%
Decision of parents against advice of school personnel	1%
Lack of understanding of parents rather than lack of participation	1%
Enrolment in this class because appropriate class was too far away	0%
Enrolment in this class because special school (e.g. Sunny View) is filled	0%
Enrolment in this class because special school (e.g. Sunny View) was too far away	0%
Don't know	1%

* Some parents gave more than one description.

assessments.

Most of the parents (78% as shown in Table 57) were not aware of any program/curriculum changes, preparations and/or special provisions which the schools had made for their PH/HI children. Several, however, felt that some changes should be made - individualized help and teachers with special training were most frequently mentioned. (see Table 58).

Summary

Very few PH/HI children had directly transferred from segregated to their present integrated settings and very few were rated as severely handicapped, consequently it seems reasonable that the principals and parents reported very few problems associated with the transfer, enrolment and/or placement of the children and also did not describe a lot of specialized changes and/or preparations which had been made for the children. However, in looking at the information recorded in the various tables in this section, one gets the feeling that the school system does respond in a number of different ways to the various needs of these children and that resources which could be more heavily drawn on (particularly in the form of well qualified personnel) do exist.

Some other points might be noted:

(1) The Department of Public Health is usually involved when these students are transferred and placed.

(2) Affective preparation for principals and teachers is not so likely to take place

TABLE 57

PARENTS' DESCRIPTIONS OF PROGRAM/CURRICULUM CHANGES, PREPARATIONS AND/OR SPECIAL PROVISIONS WHICH THE SCHOOLS HAD MADE FOR THEIR PH/HI CHILDREN (N=78)

Description	Percentage of Parents Who Gave Description*
Student gets individualized help	10%
Flexibility with respect to subjects student takes	6%
School personnel have been made aware of student's needs	4%
School had physical education volunteer design special program	3%
Student allowed alternative to physical education program	3%
Special privileges when weather is bad	1%
Has lunch in classroom	1%
Allowed to use nurse's washroom	1%
Freedom to come and go when required	1%
Student allowed to remain at particular school as parents wished	1%
Special transportation facility	1%
School got parents involved in student's special program	1%
Not aware of any changes, etc.	78%

* A few parents gave more than one description.

TABLE 58

PARENTS' DESCRIPTIONS OF CHANGES, PREPARATIONS AND/OR SPECIAL PROVISIONS WHICH THEY WOULD LIKE THEIR PH/HI CHILDREN TO HAVE IN SCHOOL (N=78)

Description	Percentage of Parents Who Gave Description*
Individualized attention/help	17%
Teachers with special training	6%
Positive reinforcement for student	3%
Teacher to go into home during short term crisis	3%
No split and/or mixed grades	1%
Preparations for future school/trade training	1%
Student should learn more	1%
Reasonable lunch hour	1%
No pressure on student when he/she feels ill	1%
Specialized exercises	1%
ESL class (English as Second Language)	1%
Better communication between hospital, teacher and school personnel	1%
Alternative/recreational projects to physical education	1%
Report student problems before they get out of hand	1%
	1%

* A few parents gave more than one description.

as cognitive preparation.

(3) Little use is made of films, speakers or outside agencies such as the MARCH OF DIMES for cognitive and/or affective preparation.

(4) Several parents are interested in more individualized attention/help for their PH/HI children.

(5) Preparations and changes which are appropriate for one child may, in some instances, be damaging to another (e.g. affective preparation for peers may be an invasion of privacy for the PH/HI child).

Descriptions of and Opinions about Present Placements

Principals' Opinions

The principals/vice-principals' descriptions of the programs/curriculum/groupings of 143 PH/HI children are organized into Table 59. Educational assistants, volunteers, special equipment and extra teacher preparation time are not common characteristics of the children's programs. Individualization and remediation are being offered to approximately half of the children.

Parents' Opinions

The parents were presented with a list of seventeen benefits which children might receive from being in regular educational settings. Table 60 shows the percentage of parents who said their children were receiving each benefit. The parents seem to be less sure that their children are receiving certain academic benefits than they feel about other benefits related to socialization and maturation.

TABLE 59

PRINCIPALS' DESCRIPTIONS OF PROGRAMS/CURRICULUM/GROUPINGS OF PH/HI CHILDREN

Description	Percentage of Students (N=143)
Regular monitoring of student's program	73%
Flexible curriculum	65%
Continuous progress	57%
Individualization	55%
Cooperation/communication between administrators and teachers to plan program	52%
Remedial instruction	48%
Materials/activities to increase self-confidence	42%
Materials/activities to promote social adjustment	38%
Materials/activities to promote emotional health	36%
Special curriculum materials	34%
Curriculum specialists/consultants	31%
Alternate methods of evaluation and testing	30%
Support/resource personnel/experts	28%
Sharing/communication between special education and regular teachers to plan program	25%
Multi-age/family grouping	20%
Teacher preparation time	17%
Special equipment (e.g. typewriter)	10%
Volunteers	9%
Educational assistants	8%

TABLE 60

BENEFITS PH/HI CHILDREN ARE RECEIVING FROM SCHOOLS: PARENTS' OPINIONS

Benefit	Percentage of Students Receiving Benefit (N=78)
Contact with many students	83%
Happiness	78%
Sense of independence	77%
Assumption of responsibilities	77%
Sense of freedom	76%
Contact with many teachers	74%
No stigmatization	71%
Feeling of security	69%
Sense of accomplishment	69%
Arousal of interests	68%
Sense of usefulness	64%
Wide variety of learning experiences	63%
Broadened horizons	62%
Wide variety of subject matter	59%
Satisfaction of curiosity	56%
Participation in extra-curricular activities	55%
High educational standards	47%

Close to 75% of the parents felt that, given the child's physical handicap and/or health impairment, the educational arrangement the child was in at the time of this study was the most suitable one. The parents who answered "NO" to the question elaborated as follows:

- Student needs individualization (7)
- Student needs proper special education program (7)
- Student needs teachers with special training (5)
- Student needs teachers who understand problems of child (3)
- Student needs speech therapy (2)
- Student needs home teaching on a short-term basis (2)
- Student needs longer lunch hour (1)
- Mobility problems require inside stationary classroom (1)
- Student's program should be mix of specific physical education activities and academics (1)
- Student requires special allowances due to weakness (1)

Close to half of the parents (45%) reported that their children's placements had been reviewed during the school year of this study and provided the following details (those who said "NO" tended not to elaborate):

- Parent discussions with school personnel (17)
- Review is an ongoing process (7)
- Discussion about child's placement (7)
- Program Placement and Review Committee (2)
- Discussion of child's promotion (2)
- Parent/school discussion with specialized health agency (2)
- Discussion with psychologist regarding student attitudes (2)
- Parent did not understand what school personnel were saying (2)
- Student having serious academic problems (1)
- Nothing was settled, no changes effected (1)
- Nothing different than regular student (1)

Teachers' Opinions

The majority of the teachers (85% of 148) felt that, given the students' physical handicaps and/or health impairments, the educational arrangements they were in at the time of this study were the most suitable ones. Those who said "NO" recommended the following arrangements:

- -Special Education (Special Program) (5)
- -Smaller class (3)
- -Special Education (Behavioral) (1)
- -Special Education (Learning Centre) (1)
- -With the "right teacher" (1)
- -Program with developmental focus (1)
- -Situation where child didn't have to sit for long periods of time (1)
- -Enrichment class (1)
- -One-to-one attention (1)
- -Child must not be pushed (1)
- -Parents need counselling (1)
- -Class placement O.K., but teacher needs more support (1)

- -A segregated program (1)
- -Health Class (1)

Most of those whom the teachers felt were misplaced had had their placement reviewed in that school year and, in many cases, recommendations and/or changes were being made.

Summary

The majority of the parents and teachers (75% and 85% respectively) felt that the PH/HI students were in the proper educational programs/curriculum/ groupings which are, according to the principals, quite likely to be flexible, individualized, allow for continuous progress and be monitored regularly, but very unlikely to have special equipment, volunteers, educational assistants or special teacher preparation time.

For those students whom the parents and teachers felt could have better arrangements, segregated settings were almost never recommended as solutions; instead, individualization, special education programs (defined as integrated in this study) and teachers with special training were the most common suggestions.

The parents were more likely to think the children were receiving benefits from the regular school environment in areas associated with socialization and maturation than in areas related to the academic program.

Changes Needed for More Integration

Principals' Opinions

The principals/vice-principals were asked to suppose that several physically handicapped and health impaired students (many severely afflicted) were to be integrated into their schools and to describe the changes, if any, which would have to be made. They were asked to list the changes under the headings of (1) school buildings and facilities, (2) school staffing, (3) staff training, (4) special services, (5) program/ curriculum and (6) other changes. Their responses are shown in detail (with some overlap) in Tables 61 to 66. The changes which were each mentioned by at least 25% of the 64 principals/vice-principals were:

TABLE 61

CHANGES NEEDED IN SCHOOL BUILDINGS AND FACILITIES IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

Buildings and Facilities	Percentage of Principals/Vice-Principals Who Named Change (N=64)
Modified washrooms	86%
Ramps	72%
Elevator	59%
Alter classroom furniture	36%
Locate classrooms on lower/ground floors	36%
Alter fountains/sinks in hallways/classrooms	22%
Redesign doorways	19%
Alter cafeteria facilities	17%
Handrails in corridor	16%
Improved access to washrooms	16%
Change entrances and exits	13%
Change doors/electrical doors	11%
Handrails in washroom	9%
Alter lockers	9%
Special typewriters	9%
Special gym facilities	9%
Improved access to pool	8%
Warm water swimming pool/special pool	8%
Improved access to yard/playground	6%
Alter lunch room	6%
School bus port/access for motor vehicle	6%
Better lighting	6%
Better heating	5%
Better acoustics/acoustic ceiling	5%
Special area for child who needs rest	5%
Improved access to gym	5%
Alteration of fire doors	5%
Wheelchair lift	5%
Improved access to gym	5%
Alter washroom doors	5%
Better transportation to school	3%
Redesign playgrounds	3%
Better shelving	3%
Audio training equipment	3%
Special fire alarm for hearing impaired	3%
Special equipment in classrooms	3%
Access to basement	2%
Soundproofing	2%
Specialized safety requirements	2%
Escalators	2%
Lower light switches	2%
Therapy facilities	2%
One-floor plan	2%
Modified stairways	2%
Special first-aid clinic	2%

(Cont'd)

TABLE 61 (Cont'd)

CHANGES NEEDED IN SCHOOL BUILDINGS AND FACILITIES IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

Buildings and Facilities	Percentage of Principals/Vice-Principals Who Named Change (N=64)
Wider library aisles	2%
First-aid equipment	2%
Hearing aids	2%
Lower telephone	2%
Visual aids	2%
Computers	2%
Headphones	2%
Teacher console for microphones for deaf	2%
Special carpeting	2%
Special playground facilities	2%
Humidifier/air conditioning	2%
According to child's needs	8%
No changes - could not accommodate severe cases	2%

TABLE 62

CHANGES NEEDED IN SCHOOL STAFFING (KIND OF STAFFING, NUMBERS) IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

School Staffing	Percentage of Principals/Vice-Principals Who Named Change (N=64)
Smaller class size/more teachers	61%
Attendants/aids/assistants	45%
Qualified personnel for specialized services	28%
Staff to meet needs of particular students	20%
Therapists	13%
Aware/flexible/caring staff	9%
Health care personnel/nurse	6%
Consultants	6%
Parent volunteers	5%
Office/support staff involvement	5%
Gym teacher for physical handicaps	5%
Caretakers to help students on and off bus	3%
Adult to help with fire drills	3%
Resource centre assistant	2%
Young staff people with energy	2%
Careful staff selection	2%
Allow staff to move if they want	2%
More counselling time	2%
Supervision	2%
Limited number of PH students per class	2%
Supervision for bussed-in students	2%
One adult for each severe PH student	2%
Special cook	2%
On-staff psychologists	2%
On-staff social workers	2%
No changes/staff not a problem	6%

TABLE 63

STAFF TRAINING NEEDED IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

Staff Training	Percentage of Principals/Vice-Principals Who Named Type of Training (N=64)
In-service training	45%
Special staff training for certain handicaps	38%
Awareness/attitudinal training	17%
All staff trained (office, caretakers, etc.)	9%
Increase sensitivity of staff	6%
Must be able to pick staff	6%
Understanding/empathetic staff	6%
Workshops (e.g. March of Dimes)	6%
Strong group commitment	5%
On-going service and support from consultants	5%
First-aid training/health training	5%
Alert and prepare teachers	5%
Visit classes in Sunny View	3%
Increase willingness of staff	3%
After school/summer courses	3%
Training for administration	3%
Release time to work with families	2%
Community college course for aids	2%
Training for effective programming	2%
Training for communicating with parents	2%
Compulsory training	2%
Staff trained before arriving at school	2%
Training for social/emotional problems	2%
Train a few staff members	2%
Time off for training	2%
Supervision of teachers	2%
Short course to develop skills	2%
"Hands on" training	2%
Staff trade-off with Sunny View, O.C.C.C.	2%
Emergency training	2%
Depends on handicap/health impairment	3%

TABLE 64

SPECIAL SERVICES NEEDED IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

Special Services	Percentage of Principals/Vice-Principals Who Named Special Service (N=64)
More health/nurse services	36%
Transportation	33%
More consultant/resource personnel	27%
Therapists	17%
More social services	14%
Special medical services/facilities	6%
Fire drill/emergency procedures	5%
Psychological services	5%
Lunch program	5%
Social work services	3%
Special diets	3%
Aids	3%
Involvement of agencies (e.g. March of Dimes)	3%
Support from Special Education Department	3%
Caretakers to supervise arrivals and departures	3%
Different books (e.g. large print)	2%
Lunch supervision	2%
School nurse as TBE employee	2%
Backup power for life support systems	2%
Financial assistance	2%
Monitoring for industrial arts program	2%
Audio-video technicians	2%
Repairmen for wheelchairs, etc.	2%
Special lighting	2%
Hearing aids	2%
Support staff backup	2%
Counselling for teachers of terminally ill students or students in severe pain	2%
Volunteers	2%
A bank of specialized equipment	2%
Special equipment	2%
Manipulative equipment	2%
Guidance counselling	2%
Interpreter	2%
Washroom matron	2%
Office staff for home contacts	2%
Battery charger for electrical wheelchairs, etc.	2%
Depends on individual needs	9%

TABLE 65

PROGRAM/CURRICULUM CHANGES NEEDED IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

Program/Curriculum Change	Percentage of Principals Vice-Principals Who Named Change (N=64)
Adjust physical education program	38%
Subject matter alteration/modified programs	28%
Individualized curriculum	27%
Special materials/equipment	16%
Meet specific needs of students	14%
Itinerant teacher/consultant	6%
Visual aids	5%
Special evaluation procedures	5%
Activities to develop social skills	5%
Education for students about handicaps	3%
Books with handicapped people in them	3%
Extra teacher preparation time	3%
Timetable adjustments	3%
Adjustment in pace of delivery	3%
Writing devices	3%
Remedial programming after hospitalization	3%
Adjust music program	3%
Special extra-curricular activities	3%
Program to emphasize child's strengths & foster a sense of achievement	3%
Learn how not to over-compensate	2%
Modified library programs	2%
Small group activities	2%
Alternate ways of giving and getting information	2%
A realistic approach to learning	2%
Coordinate all resources for child	2%
Computer terminal	2%
Program for gifted	2%
No rotary for severely handicapped	2%
Alter field trips	2%
Guidance program about integration	2%
No changes	3%

TABLE 66

OTHER CHANGES NEEDED IN SCHOOLS IF MORE PH/HI CHILDREN WERE TO BE INTEGRATED

Other Changes	Percentage of Principals/Vice-Principals Who Named Change (N=64)
Close cooperation between parents and school	16%
Involvement of regular students	14%
Special materials	5%
Community involvement	5%
Educating community about integration	5%
Resource personnel for emergencies	3%
Outside support services	3%
Changes in time and personnel used for recess	3%
Workshops by disabled	3%
Bus area	3%
Day care	3%
Special services (e.g. braille)	2%
Special buses and cars	2%
Try not to single PH/HI children out	2%
Pre-enrolment parent-teacher meetings	2%
Effective preparation for other teachers or students	2%
Gradual integration	2%
Hot meals	2%
Improve transportation system	2%
Stimulating environment	2%
School as residential unit	2%
Therapeutic equipment (e.g. whirlpool bath)	2%
Special equipment	2%
Overhead projectors for kids on beds	2%
Extra storage space for equipment	2%
Special dinners (diet requirements)	2%
Attendance checks	2%
Special seating arrangements in classes	2%
Better communication with caretaking staff about Board policies	2%

-Modified washrooms
-Ramps
-Elevators
-Alter classroom furniture
-Locate classrooms on lower/ground floor
-Smaller class size/more teachers
-Attendants/aids/assistants
-Qualified personnel for specialized services
-In-service training
-Special staff training for certain handicaps
-More health/nurse services
-Transportation
-More consultant/resource personnel
-Adjust physical education program
-Subject matter alteration/modified programs
-Individualized curriculum

Finally, the principals/vice-principals were asked if they knew of any children who could be integrated if such changes were made in their schools; 6 said "Yes". One said all students in Special Program (Health) classes could be integrated, one knew of 12 children and the others knew of 5 more.

Demographic Data

The demographic data were collected through the parent interviews.

As shown in Table 67, 81% of the children were born in Canada, mostly in Ontario. Of those not born in Canada, nearly all had been in Canada for more than five years.

While 81% of the children were born in Canada, fewer (68%) learned to speak English first (see Table 68).

TABLE 67

PLACE OF BIRTH OF PH/HI CHILDREN (N=78)

Place of Birth	Number of PH/HI Children
BORN IN CANADA	
Ontario	59
Quebec	2
Nova Scotia	1
Manitoba	1
NOT BORN IN CANADA	
India	2
U.S.A.	2
Greece	2
Jamaica	2
Uganda	1
Burma	1
Philippines	1
Indonesia	1
Venezuela	1
NO RESPONSE	2

The 25 parents who said their children did not learn English first reported, however, that their children could speak English fluently.

Five parents reported that their children could speak French fluently along with English or English and another language.

Table 69 shows the adults with whom the PH/HI children were living at the time of this study. Few were living with adults other than their natural parents but 11 were living with their mother and not their natural father.

With respect to older and younger siblings, 39% of the PH/HI children did not have older siblings and 42% did not have younger siblings. Of those who did have older and younger siblings, most had only one or two; 18% had more than two older siblings and 5% had more than two younger siblings while 4% were only children.

Tables 70 and 71 give the socio-economic status of the children's fathers and mothers. The figures in these tables were compared with those of the grade nine survey (Wright and Dhanota, 1981) and it was found that the parents of the PH/HI children who consented to be part of this study were more likely to rank in the high categories #5 and #6 than the parents of the 1980 grade nine students - 32% of the fathers and 11.5% of the mothers fell in these categories compared with 18.2% and 4.1% respectively in the grade nine survey.

TABLE 68

FIRST LANGUAGE(S) SPOKEN BY PH/HI CHILDREN (N=78)

First Language	Number of PH/HI Children
English	53
Greek	8
Italian	6
Portuguese	3
Panjabi	2
Cantonese	2
Arabic	1
Filipino	1
Spanish	1
Ukrainian	1

TABLE 69

ADULTS WITH WHOM PH/HI CHILDREN LIVE (N=78)

Adult	Number of PH/HI Children
Mother	73
Father	62
Step parent	4
Grandmother	1
Grandfather	1
Aunt	1
No response	2

TABLE 70

SOCIO-ECONOMIC STATUS BASED ON FATHER'S OCCUPATION (N=78)

SES Category	Blishen's Index Values*	Illustrative Occupations	Percentage of PH/HI Children
1		pensioner, student, retired, unemployed	2.6%
2	18-32	newsboy, labourer, truck driver, waiter, carpenter, orderly, door-to-door salesmen	24.4%
3	33-40	shipping clerk, welder, referee, dancer, engraver, hotel manager, teller, cashier	6.4%
4	41-54	mail carrier, musician, typist, athlete, most foremen, many supervisors, real estate sales, minister, tool & die occupations, physiotherapist	15.4%
5	55-65	social worker, writer, editor, draftsman, psychologist, many managers, elementary school teacher	14.1%
6	66-75	chemist, pilot, accountant, secondary school teacher, lawyer, physician	17.9%
None		self-employed, no information, not codable	19.2%

* Only first two digits of Blishen's values were used for coding.

TABLE 71

SOCIO-ECONOMIC STATUS BASED ON MOTHER'S OCCUPATION (N=78)

SES Category	Blishen's Index Values*	Illustrative Occupations	Percentage of PH/HI Children
1		homemaker, unemployed, student, pensioner, retired	42.3%
2	20-33	charwoman, chambermaid, babysitter, hairdresser, sewing machine operator	12.8%
3	34-45	cashier, typist, bookkeeper, nursing assistant, bank clerk	14.1%
4	46-57	secretary, actress, statistical clerk	10.3%
5	58-66	physiotherapist, community college teacher, personnel officer, policewoman, nurse	6.4%
6	67-87	university professor, elementary school teacher, secondary school teacher, social worker, psychologist, physician, lawyer	5.1%
None		self-employed, no information, not codable	9.0%

* Only first two digits of Blishen's values were used for coding.

Students' Histories

The 78 parents/guardians were asked to describe the histories of their children since they first started some form of education and to include any times which the children spent in noneducational settings; this produced voluminous information which was very difficult to organize for this report. What follows does not include every bit of that information but is information selected and presented according to settings other than regular class settings. A labelling system has been used for the children which it is hoped will help indicate that some children have spent time in more than one setting and which could allow the reader if so desired to sort out the various settings a particular child has experienced.

A. Sunny View Elementary School

Sunny View was opened in 1953 to meet the special educational needs of disabled children in the Metropolitan Toronto area. It operates under the Toronto Board of Education but is open to students throughout Metro. Sunny View offers special academic and physical rehabilitation programs designed by experienced specialists in teaching, physical and occupational therapy, speech therapy and health-care support. Approximately 250 children attend Sunny View.

Of the 78 parents/guardians interviewed, two reported that their children had spent time in Sunny View. Child A1 was severely handicapped with Polio and spent 10 months in Sunny View at the grade two level after which he was integrated into a Toronto elementary school in regular classrooms. Child A2, brain damaged with cerebral ataxia, attended Sunny View for junior and senior kindergarten and grade one after which she also entered regular Toronto classrooms.

B. The Hospital for Sick Children

According to the 78 parents, 12 of their children had spent time in the Hospital for Sick Children and 7 did not receive education while there. Of those 7 children, 5 were there for one month and 2 for four months. B1 had hemophilia; B2, a cardiac condition and asthma; B3, rheumatoid arthritis; B4, spina bifida with brain damage; B5, a kidney transplant; B6, hydrocephalus with shunt; and B7, a congenital heart condition. One child, B8 with triplegia and brain damage had been there for ten months but the parent gave no information about education.

However, it is possible for children to receive education while in the Hospital for Sick Children. The Special Education Department of the Toronto Board of Education has a program called Special Program (Hospital and Institutional) which serves pupils who have emotional, behavioural and/or physical problems of sufficient severity to necessitate referral to a care and treatment facility. The educational programs are funded by the Ministry of Education under Section 28 of the Ministry of Education

Grant Regulations and provide continuing education for students in the various facilities on either a residential or day treatment basis. Programs are taught by Toronto Board of Education teachers, appropriately experienced, with Special Education qualifications. The Department runs programs in four units at the Hospital for Sick Children - the Adolescent and Family Unit, the Child Development Clinic, the Child and Family Unit, and the Medical Unit. At the time of this study, the Medical Unit had eight teachers on the medical wards involved with dialysis, hemotology, oncology, orthopedics, cardiology, respiratory disease, neurology, urology, burns, isolation and general medicine. The student/patient population ranges from late kindergarten to grade 13, including special education. A child may receive education immediately if he/she is to be in the Hospital for more than two weeks.

According to the parents, 4 children received education while in the Hospital for Sick Children which lasted from one month to ten months. B9 had a nephrotic syndrome; B10, diabetes; B11, cerebral palsy with brain damage; and B12, diabetes.

C. The Ontario Crippled Children's Centre

The O.C.C.C. is an active rehabilitation hospital which is concerned with the total needs of physically handicapped children and young adults. One hundred and six beds serve those who cannot be treated as out-patients. There is a school program from nursery to secondary levels, including instruction in Blissymbolics for non-verbal young people. Comprehensive services are provided in the rehabilitation engineering and prosthetic departments. There are therapeutic and recreational swimming pools, a gymnasium and a special unit for the chronic asthmatic patient. Principal funding of the Centre is provided by the Government of Ontario. Additional funding is supplied by the Ontario Society for Crippled Children, Health and Welfare Canada, foundations, organizations and private donations.

Six of the parents reported that their children had spent time at the O.C.C.C. and five said the children had received education while there (one did not know). B8 and B11 received kindergarten education (16 and 20 months respectively) while there. C1, C2 and C3 who were mild, medium and severe asthma cases spent 10, 5 and 4 months respectively at the O.C.C.C. - at least two and probably all of them received education. C4 with calcaneous feet spent 1 month there and received schooling at the grade six level.

D. Special Program (Health)

This special education program operated by the Toronto Board of Education is designed to meet the needs of those pupils who require a protected school environment for health reasons. These programs are available to Metropolitan Toronto students between the ages of six and sixteen years who are able to benefit from an education program and who have been recommended to Special Program (Health) by the local Medical Officer of Health for one or more of the following reasons:

a) students who cannot attend regular school because of low physical tolerance and/or mobility problems;

b) students who are recuperating from or being prepared for surgery or long-term hospitalization;

c) students with medical conditions involving clinic and hospital appointments which seriously affect school attendance; and,

d) students who require diet supervision or rest time during the school day.

This program was defined as segregated for this study. At the time of writing, approximately 80 Metro Toronto students not in this study were enrolled in this program.

Six children had attended the Health classes including B2 for grades one and two and C3 for grades five and six. D1 and D2 who both had asthma attended Special Program (Health) for five and three years respectively. D3 with thalassemia minor attended for grade two and D4 with muscular atrophy attended for grades four to seven.

These six children had, on the average, spent 2.7 school years in Special Program (Health); four had asthma.

E. Special Program (Speech)

This special education program of the Toronto Board of Education is available in all junior and senior elementary schools in Toronto for pupils with speech and language problems in need of remediation. Secondary school pupils may also request this service. Speech problems may be characterized by: defects of articulation (including distortions, substitutions or omissions of speech sounds), defects of voice production, defects of rhythm (i.e., stuttering, cleft palate speech), speech associated with cerebral palsy, and speech defects related to impaired hearing and delayed speech development.

This is a withdrawal special education program defined as integrated for this study.

One student, E1 with diabetes, had participated in this program for five years.

F. Special Program (Home Instruction)

This special education program of the Toronto Board of Education is designed to meet the needs of those children who are unable to attend an in-school program because of physical, behavioral or emotional disabilities. Provision of Home Instruction for pupils with these disabilities is considered only after all possibilities for a modified program within a school have been explored. This program was defined as segregated in this study.

Five children, B2, B8, B11, C4 and F1 with thalassemia major had received Home Instruction.

G. Special Program (Perceptual)

This past special education program of the Toronto Board was designed to meet the needs of children with learning disability problems of a neurological and perceptual nature.

Two children, B2 and G1 with hemophilia, each spent four years in a perceptual program.

The program was defined as integrated.

H. Special Programs (Learning Disabilities) - Self-Contained, Itinerant and Resource Room

These special education programs of the Toronto Board of Education are designed to meet the needs of pupils with disorders in one or more of the processes involved in understanding or using symbols or spoken language. The disorders result in a significant discrepancy between academic achievement and assessed intellectual ability with deficits in at least one of the following areas:

a. receptive language (i.e., listening, reading);
b. language processing (i.e., thinking, conceptualizing, integration);
c. expressive language (i.e., talking, spelling, writing); and,
d. mathematical computations.

This definition does not include children who have learning problems which are primarily the result of impairment of vision or hearing; motor handicaps; mental retardation; primary emotional disturbance; or environmental, cultural or economic disadvantage.

These programs were defined as integrated in this study.

Two children, H1 and H2, both of whom had epilepsy, spent five and two years respectively in a Learning Disability program.

I. Special Program (Reading Clinic)

This special education program of the Toronto Board of

Education is designed to meet the needs of those pupils who show a significant lag between their chronological age, mental ability and their reading level. They may exhibit, to a lesser degree, characteristics similar to those associated with primary reading disability.

Usually specific areas related to the reading process can be identified and remediated (e.g. deficits in oral language, experiential background, sight vocabulary, word attack skills, understanding of vocabulary, comprehension, and study skills).

These pupils may be maintained in the regular grades with ongoing remedial instruction and support offered by the Reading Clinic teacher.

The program was defined as integrated.

One child, I1 who had had a stroke, spent two school years in this program.

J. Special Program (Reading)

This special education program of the Toronto Board of Education is designed to meet the needs of those pupils who exhibit symptoms of primary reading disability and have at least average intellectual potential. Manifestations of these symptoms interfere with the reading process and are exhibited by:

a) inability to understand concepts of time and space;

b) difficulty in expressing ideas in oral or written form;

c) difficulty in understanding oral or written language, but not numerals;

d) difficulty in associative learning;

e) confusion in distinguishing and remembering letter sounds and their written form;

f) difficulty in sequencing letters in words;

g) directional confusion of letters and words;

h) difficulty in organizing written work.

The program was defined as integrated.

One child, I1, had spent at least two years in this program.

K. Special Program (Primary, Junior, Senior)

Self-contained. This special education program of the Toronto Board is designed to meet the needs of those pupils who cannot function academically in a regular grade class because of a lack of achievement which is evidenced by significant deficits in the pupils' learning of concepts and skills. This inability to function may generally be attributed to a pupil appearing to have limited intellectual potential as indicated by a recent individual psychological assessment (within the past two years).

Withdrawal. This program is designed to assist those pupils whose limited intellectual ability and/or academic disability is less severe than those of pupils in Special Program (Primary, Junior, Senior) self-contained classes. These pupils may be maintained in regular grades with ongoing remedial instruction and support offered by the withdrawal program teacher.

These programs were defined as integrated.

According to the parents, 13 of the children had spent time (which averaged 4.3 years) in these programs. Four of the children had cerebral palsy (B11, K1, K2, K3) and two had seizure disorders (K4, K5). There was also one case each of sickle cell anemia (K6), microcephalia (K7), spina bifida (B4), asthma (D2), epilepsy (K8), Prader Willi syndrome (K9) and acidura argeus succum (K10).

L. Special Program (Learning Centre)

This special education program of the Toronto Board is designed to meet the needs of pupils who may have one or more of a variety of minimal disabilities but who may function in a regular grade class with the ongoing support of the Learning Centre teacher. School personnel, in conjunction with Special Education Department personnel, determine the needs of each school population. Consequently, the type of pupil who receives support from the Learning Centre may vary from school to school.

The program was defined as integrated.

One child, C2, had participated in the program for over 20 months.

M. Special Program (Behavioral) - Self-Contained

This special education program (defined as integrated) of the Toronto Board is designed to meet the needs of pupils who are unable to benefit from instruction in a regular grade class because of difficulties which are primarily emotional and/or behavioral as indicated by a recent psychiatric assessment.

Two children, M1 and M2, both with cerebral palsy spent approximately four years each in this program.

N. Other Special Education Programs - Toronto Board

Six parents reported that their children had participated in a program which was probably a special education one, but could not name the type of program. The children were B2, B9 and K3 as well as N1 (hemophilia), N2 (epilepsy) and N3 (cerebral palsy).

O. Other Special Education Programs - Outside Toronto Board

B4 had spent time in a special education program in the Metropolitan Separate School Board and N2 in Quebec and Etobicoke.

P. Correspondence

B5 took an Ontario Ministry of Education correspondence course for grade one while in the Philippines.

Q. Other Hospitals

Two children, B5 and Q1 with a cardiac condition, spent short periods of time in hospitals outside Toronto where they did not receive education.

R. Time at Home

Five children, A1, B5, C3, D4 and K9, had spent time at home ranging from one month to five months. Two received no education, two were taught by a parent and one was taught by a tutor.

S. Home/School/Hospital

According to the parents, 8 children spent periods of time (an average of 10 months) during which they constantly moved from one location to another. Sometimes they received education (tutors, itinerant teachers, hospital teachers) and sometimes they didn't.

The children were B1, B8, B9, C4, D4, F1 as well as S1 and S2 who both had sickle cell anemia.

T. Other Types of Education

One child, K9, received several months of a therapy approach called "patterning" under the direction of the parents either while attending regular classes or while at home full-time. This method of education was learned by the parents in the United States.

Summary

Quite a large proportion (59%) of the 78 children discussed by the parents had spent time in settings (where they may or may not have received education) other than regular classrooms; 33% had spent time in settings defined as segregated - Sunny View, hospitals, O.C.C.C., Special Program (Health), Special Program (Home Instruction), education by correspondence and at home.

A subset of approximately 17% had spent time in more than one of the settings described in this section.

Testing Information

In addition to actually administering the various tests, scales and inventories to the PH/HI students and the two groups of control students, the research technicians were also required to keep track of testing times and special testing arrangements. The results for the PH/HI students were then compared with those for the control students.

The Standard Progressive Matrices Test

The children were given as much time as they needed to complete this test. The PH/HI children averaged 24.0 minutes while the control students averaged 23.9 minutes.

For the PH/HI students, 3 needed help in turning the pages and 4 needed help in marking down the answers. The technicians also noted that 4 were very impatient to finish, 2 tired easily, 2 mostly guessed at the answers, 2 worked very slowly, 1 worked at a very inconsistent speed, 1 had difficulty in keeping track of what question he was on and 1 was disruptive.

For the control students, none needed help in turning the pages but 3 needed help in marking down the answers. Further, 2 were very impatient to finish, 2 worked very slowly, 1 mostly guessed at the answers, 1 was very upset and 1 had difficulty in keeping track of what question he was on.

The Gates-MacGinitie Reading Comprehension Test

The children were given a maximum of 35 minutes to complete this test. Of the PH/HI students, 5 were unable to do any of the test and the remainder completed it in an average of 25.3 minutes. Of the control students, 2 were unable to do any of the test and the remainder completed the test in an average of 21.7 minutes.

For the PH/HI students who could do the test, 1 needed help in turning the pages and 3 needed help in marking down the answers. The technicians noted that the instructions had to be simplified for 2 children and 2 worked very slowly.

For the control students who were able to do the test, none needed help in turning the pages and 1 needed help in marking down the answers. In addition, 2 needed the instructions simplified, 2 worked very slowly, 2 did not finish, 1 was very impatient to finish, 1 was apprehensive and 1 had difficulty in keeping track of which question he was on.

The Metropolitan Mathematics Achievement Test

The children were given a maximum of 30 minutes at the elementary level and 35 minutes at the intermediate and advanced levels to complete this test. Of the PH/HI students, 1 was unable to do the test and information was not recorded for 1; the remainder completed the test in an average of 22.1 minutes. Of the control students, information was not recorded for 2 and the remainder completed the test in an average of 21.7 minutes (not significantly different from the PH/HI students).

For the PH/HI students who could do the test, 1 needed help in turning the pages and 4 needed help in marking down the answers. The technicians also noted that 4 tended to guess, 2 were very impatient to finish, 2 were upset, 2 worked very slowly, 1 needed the instructions simplified, 1 tired easily, 1 left without completing the test, 1 was apprehensive, 1 had trouble keeping track of which question he was on, 1 had poor vision and 1 had poor hearing.

For the control students for whom information was available, none needed help in turning the pages or in marking down the answers. However, 1 worked very slowly, 1 guessed at the answers and 1 left without completing the test.

The IOX Self Appraisal Inventory

The children were given as much time as they needed to complete this test. Of the 84 PH/HI students, 1 was unable to do the test and the remainder completed it in an average of 15.0 minutes. Of the control students, 3 were unable to do the test and information was missing on another; the remainder completed the test in an average of 15.6 minutes.

In most cases, the research technicians read this inventory to the students; however, 10 of the PH/HI children and 8 of the controls read it themselves.

Of the PH/HI children who were able to handle the inventory, 2 were given help in turning the pages and 1 with marking down the answers. The technicians also noted that 2 worked very slowly, 2 had difficulty with the English, 2 had difficulty understanding "True" and "False", 1 tired easily, 1 was apprehensive, 1 was disruptive and 1 had difficulty understanding the inventory.

For the control students who were able to handle the inventory and for whom information was available, none needed help in turning the pages or in writing down the answers. However, 3 asked a lot of questions, 1 was disruptive and 1 had difficulty keeping track of what question he was on.

The Social Scale

The children were given as much time as they needed to complete the Social Scale. Of the PH/HI students, 1 was unable to do the activity and information was not recorded for 2; the remainder completed the activity in an average of 12.2 minutes. Of the control students, 2 were unable to do the activity and information was not recorded for 1; the remainder completed the activity in an average of 10.9 minutes.

Of the PH/HI children who were able to do the activity and for whom information was recorded, 3 were given help in writing the names and 3 were given help in drawing the lines. The technicians also noted that 2 had trouble keeping track of where they were, 1 was upset, 1 worked very slowly, 1 was disruptive, and 1 had poor vision.

For the control students who were able to do the activity and for whom information was available, 4 were given help in writing the names and none in drawing the lines. In addition, 2 needed the instructions simplified and 1 worked very slowly.

Summary

The data and information in this section indicate that, on the whole, the PH/HI children had no more trouble taking the tests than the control children. In all five cases, t-tests showed no difference in the amount of time they required compared with the controls and only a very few needed help in turning pages, writing or marking answers.

SUMMARY AND DISCUSSION

One teacher related this anecdote:

> There is a segregated class in this school and some of the students come to me for mathematics. One day I was away and a supply teacher had problems keeping order and apparently some of the students from the segregated class joined in the rowdiness. This surprised the regular students who reported, "Hey, they're just like us!"

This research study is about physically handicapped and health impaired children in regular elementary schools. The topic is a complex one but the above anecdote illustrates very clearly one of the primary reasons it must not be neglected.

The study has been done within the context of two weighty events. First, 1981 has been proclaimed the International Year of Disabled Persons, the main objectives of which are to promote integration of disabled people into the community, to promote the enjoyment by the disabled of rights and opportunities which are available to other people in society, and to prevent disabling conditions. Secondly, The Education Amendment Act, 1980 (commonly known as Bill 82) has been passed in Ontario and ensures (1) universal access of all Ontario school age pupils to a publicly supported education, regardless of the pupil's special needs; (2) the provision of special education programs and special education services that meet the needs of exceptional pupils; and (3) involvement and participation of the parents or guardians of exceptional pupils in the assessment, identification and placement of such pupils, including the right to withhold permission for a particular placement and the right to require a review of the pupil's placement after three months. The simultaneous occurrence of these two events provides a unique backdrop against which to interpret the findings of this study while, conversely, the findings provide considerable "food for thought" for any individual considering the implications of the events for all physically handicapped and health impaired children.

The study was begun with very little knowledge about these children, so little, in fact, that the process of designing the study was essentially a gamble. No one knew for sure how many PH/HI children were attending regular schools and could be involved in such a study, no one knew where they might be located and very little was known about their characteristics and histories. Fortunately, the design which was chosen which was basically a comparison of the integrated handicapped children with their non-handicapped peers was the best. A design which would have compared the children's experiences in integrated settings with previous experiences in segregated settings would have failed since not many of the children had experienced both; a design which would have compared integrated children with segregated children would have focussed on the issues of integration from a more awkward perspective.

Because the topic was a sensitive one on which to do research and because the investigators requested a lot of anyone who participated, the final sample was fairly small and not truly random. Consequently, the results cannot, statistically speaking, be generalized to other children and all statistical differences must be treated with caution. However, this limitation is somewhat mollified in that the sample was shown to be very representative on a number of variables of the larger group of PH/HI children in the system and because many of the findings reinforce those reported from other research studies. The findings should be useful to anyone involved with educating physically handicapped and health impaired children.

Four other points should be made. First, the study has been descriptive and exploratory rather than experimental. It does not provide a list of definitive answers or quick solutions but it has produced a lot of information and ideas. Secondly, the findings are presented as summaries and trends which are true for the majority of the children; there may be parents, teachers or principals who, upon reading the report, are deeply disappointed because they feel that the concerns they have for a particular child have not been dealt with adequately and this is important since the individual needs of each child should be considered in seeking solutions. Thirdly, the report in no way presents information of a medical nature; that is, while handicaps and health impairments are mentioned, they are not described in the report. Finally, the definition of integration which has been used for children in the Toronto system for the purpose of this study has proved to be crucial to the outcomes and how they might be interpreted. Children were considered integrated if they were enrolled in regular classes or if they were enrolled in special education classes which were (1) housed in the regular schools and (2) not self-contained classes primarily established for children with special health, orthopedic or communication needs.

What follows is a summary and discussion of the major findings with some interpretation and a few suggestions for policy formation.

Numbers, Characteristics and Placements

There were approximately 300 physically handicapped and health impaired (PH/HI) children attending Toronto elementary schools at the time of the study; more were health impaired than physically handicapped. They had a wide variety of conditions, the most common being asthma, neuroconvulsive disorders, cardiac (and related disorders), diabetes and cerebral palsy. Very few were classified as severely handicapped but close to 30% were neurologically impaired. The neurologically impaired were most likely to have neuroconvulsive disorders, cerebral palsy or spina bifida with hydrocephalus. The majority of the children were enrolled in regular classes - the remainder (about 20%) were enrolled in special education classes defined as integrated in the local schools. The neurologically impaired were more likely to be in special education classes than those not neurologically impaired. Only 6% of the children had directly transferred from a segregated educational setting but 33% had been in segregated settings at some time since beginning their educational careers. Close to 60% had been in settings other than a regular classroom. On the average, the children were the same age as their classmates with whom they spent the most time but they had higher rates of absenteeism from school. There was a greater tendency for those who participated in the study to come from families who rated high on the Blishen socio-economic scale, to be born in Canada and to learn to speak English first than the general school population.

School Staffs Favor Well-Planned Integration

The parents, teachers and principals favored integration for the PH/HI children in the study; in only one or two cases did someone suggest that a child would be better off in a segregated setting. In the most general terms, the teachers seemed to have the same feelings about the PH/HI children as they did about the control children with the exception of feeling more protective to some. The principals expressed mostly positive feelings. Teachers and principals basically felt they had enough time for the children and reported few problems of an administrative nature. They generally felt that other children in the same classrooms were not affected negatively and that the PH/HI children were rarely detrimental to the existing programs/curriculum/groupings. However, while the majority seem to generally support the concept of integration, they do have reservations. It is also true that certain things could be better for those children already attending regular schools (as the findings in this study show) and that the integration of more PH/HI children would need to be well planned. Many of these ideas are further illustrated in the following quotations:

> Every effort should be made to integrate PH/HI children in the regular school system. The school is the initial stage for integration into society. Regular students would be better for early exposure. In fairness to all involved, we must proceed cautiously, or we'll defeat the whole idea and set it back. Don't know how far we can go in accommodating very seriously handicapped children. Integration teaches the whole community something important.
>
> There is no excuse not to integrate children in a city like Toronto which has resources.
>
> We must not take on more than we can handle or all, not just the PH/HI children, will suffer.
>
> We can't turn every school in Toronto into a Sunny View. It would be too expensive. With this limitation, I think PH/HI children should be integrated. Perhaps the solution would

> be to have one school with special facilities in each area of the city. We shouldn't abolish special schools; some parents might prefer them for their children.
>
> I would love to have a school equipped to take the PH/HI children. It's a big responsibility to properly look after them. We should treat them as much as possible like 'regular' students - it is what they want most.
>
> Mainstreaming is a good idea but it depends on how, when and where.
>
> Cutbacks and integration equals a bad situation for everyone involved.
>
> I don't believe in total integration in schools without adequate facilities.

Information, Knowledge and Communication are Prerequisites to Successful Integration

For integration of PH/HI children to be successful, teachers, principals and perhaps other students must be well informed and knowledgeable. It should come as no surprise to anyone in the field of education that the vast majority of the teachers and principals in this study had had no professional training in this area and reported feeling a little inadequate especially in the areas of (1) characteristics and causes of physical handicaps and/or health conditions, (2) treatment procedures and special services, (3) appropriate physical activities and (4) mechanical and electronic devices. Many felt they would like training, more information or more knowledge particularly if more integration were to take place. The findings suggest that in-service and written published materials would be welcomed by many. A couple of parents pointed out that there are films and pamphlets available which are not being used by the school system.

In addition to becoming more informed about PH/HI children on a global scale as just discussed, many teachers also emphasized that they wanted to know more about the individual child(ren) they had in their classrooms and frequently suggested that more communication with respect to the children would be desirable. Here are some typical comments:

> There is no way you can create a program for a child without the cooperation of all the people involved.
>
> Parent-teacher relations must be very good and this will take a good deal of extra time.
>
> There needs to be better communication between hospitals and other treatment agencies and the school.
>
> I did not know about the child's health problem until I phoned home about his absence. I feel it is important that I know but his mother does not agree.
>
> I did not know about this child's health problem until I became involved with this study. I'm glad to know - there might be an emergency I will have to deal with.
>
> In a rotary system, several different teachers may see the child and not be aware of the situation. We must be sure that all teachers are aware.
>
> We need information from the beginning of the year.
>
> I took the child on a one-week trip to Toronto Island School which brought his problems clearly to my attention. At first I felt resentment because of the risk and worry involved with having the child along. I did not have much

> information about the child's episodes which occur in the night. However, I found the experience very positive and it changed my attitude. I should have had more information.

> I was relieved when the child's parents signed to have information released from the school health record.

The teachers reported feeling least knowledgeable about individual children in the areas of (1) medical and therapy needs and history (of 148 teachers, 19 and 21 respectively did not know whether the child needed medical care and medication while in school), (2) family history and (3) the nature of the physical handicap or health impairment. The teachers see discussions with parents, doctors and nurses and information from the school health records as the best solutions. However, information in the school health records is available to teachers only if the parents sign for its release - an improvement in this type of communication is thus the responsibility of the parents. The school health nurses should and in fact do play a major role in promoting communication about the children among all those involved (their duties were outlined at the beginning of this report) but they can be effective only so far as they themselves are informed and so far as they obtain the cooperation of all those involved. Finally, with respect to this topic, the principals reported that the majority of the school staff had not received cognitive or affective preparation about the students and several felt that special staff training with respect to certain handicaps is needed particularly if more integration were to take place.

The Self-Concepts of PH/HI Children and their Peers are Comparable

A key finding of this study which is corroborated by other researche (as described in the review of research studies provided in Appendix A) an which would seem to be most important to consider when making decisions about PH/HI children is that their self-concepts in the integrated setting are as good as their non-handicapped peers. Their self-concepts were measured in terms of their peer relationships, school experiences, family relationships and themselves in general and did not seem to vary according to the severity of their handicaps nor according to whether or not they were neurologically impaired. The opinions of the teachers and parents supported the quantitative data.

The Cognitive and Affective Preparation of Regular Students Needs More Attention

The PH/HI children (on the average) seem to perceive the social situation fairly positively or in much the same way as the regular students and their parents tend to agree. In conjunction with this, most teachers and principals rated themselves as quite competent in identifying and dealing with negative attitudes toward PH/HI children within themselves and other students. However, there is a suggestion in the data (seemingly not obvious to the teachers, parents and the PH/HI children themselves) that other students could be more accepting of the PH/HI children particularly those who are neurologically impaired and/or moderately/severely handicapped. According to the teachers and principals, not many of the regular students had received cognitive or affective instruction or preparation with respect to PH/HI students but, even though many teachers felt it was not necessary or were reluctant to engage in such activities, this aspect of integration may need more attention in the schools. Other research studies (as discussed in the review in Appendix A) tend to support these findings.

The Neurologically Impaired are Likely to Have Emotional and/or Behavior Problems

According to the opinions of the parents and teachers and the results of the quantitative data, 20% to 25% of the PH/HI children need psychological counselling because they have emotional and/or behavior problems. Counselling from psychologists or guidance counsellors and/or special school programs were frequently considered the best ways to help the children with their problems in this area. A series of statistical tests which compared the sample of PH/HI children with their peers and which compared the PH/HI children categorized according to neurological impairment and severity of handicaps suggested that those most likely to need this type of help are the neurologically impaired whom the teachers rated as being less collected, less responsible, less consistent, less likely to complete activities and more likely to daydream, cling, whine and ask for comfort and praise. Emotional and behavior problems did not seem to be related to the severity of the physical handicaps. These findings are almost identical to those published by Anderson (1973).

Many PH/HI Children Need Remedial Academic Help

The qualitative and quantitative findings consistently indicated that many of the PH/HI children are behind in their mathematics, even after their scores were adjusted for statistically lower scores on the test of intellectual potential. And again, tests on the subdivisions of the PH/HI children showed that low academic scores (reading, mathematics and intellectual potential) were related to neurological impairment but not related to severity of handicaps. The teachers and parents estimated that at least 40% of the PH/HI students need remedial academic help while the opinion data strongly suggests that there is some confusion about who should be providing it to the children. Very few parents or teachers favor such help being provided by regular teachers, itinerant/ resource teachers, educational assistants, volunteers, guidance counsellors, parents, siblings or peers. The parents most frequently suggested teachers with special training; the teachers most frequently suggested special education teachers; the Special Education Department does not consider remedial academic work to be special education. The school system needs to give this matter serious consideration.

More Integration Would Necessitate New Approaches to Physical Education

It appears that some (about 30%) PH/HI children could benefit from more attention in physical education. The research technician who interviewed the parents felt that physical education came under the most criticism. Special, individualized help and/or programs and better information and communication are strongly favored by the parents and teachers of these children. Several principals emphasized that physical education would need to be seriously considered if more integration were to take place. Here are two interesting sets of comments from teachers:

> School boards should make physiotherapy equipment (mechanical and/or electrical) available to students in their respective schools. It would be a good idea to have an 'exercise room' which would bring kids and parents together for better communication, processing of information and comradeship.
>
> If handicapped kids are going to be totally integrated, there should be alternatives or adaptations so all can participate in physical education.

More Integration Would Necessitate Changes in School Buildings and Facilities and Special Services

There were not many severely handicapped children attending regular Toronto schools at the time of this study consequently not many found the schools inaccessible, the facilities inconvenient or needed other special services. However, considerable detail on these matters has been provided in this report which points to the many changes which would have to be made if more severely handicapped children were to be integrated; these include ramps, elevators, altered classroom furniture, altered washrooms, repairs for orthopedic equipment, taping service for notes, emergency procedures, planning for secondary and post-secondary education, aid with mobility, better transportation, aid with toileting/eating/ dressing, and help with reading/listening/writing/ talking. Some of these changes mean expensive alterations to school buildings, some mean purchasing modern electronic or mechanical equipment, some mean paraprofessionals/volunteers/attendants and some mean special education classes. The following illustrate some of these ideas:

> We need better teaching aids such as cassettes and audio/visual aids.
>
> There should be a 'bank' of special equipment that could be moved from school to school.
>
> Better facilities are needed for our child.
>
> I feel that when these kids leave the elementary school system, they won't get the caring and empathy in the secondary system.
>
> A volunteer parent is intimately involved with this child in school. It has helped.
>
> We need support staff for such things as toileting.
>
> My problem as a teacher is stress. The parents expect too much of me for such things as eating.

Successful Integration Requires Consultants from a Variety of Disciplines Who are Well Known and Readily Available to School Staffs

One research technician came to the conclusion that many teachers of the PH/HI children do not know about or understand the work of the Coordinator of Special Program (Physically

Handicapped). The opinion data supported this for 56% of the teachers did not know consultants exist and/or did not believe they are readily available. This is a little puzzling given the number of coordinators and consultants employed by the Toronto Board of Education. For example:

> It would help if we had names of consultants to contact.
>
> We need a consultant to help with programming for each PH/HI child and to check the validity of such things as restrictions on physical education.

Many PH/HI Children Need Individualization and/or Special Education Classes

Now, to end on a very positive note. Many PH/HI children need individualization and/or special education classes because of learning disorders or behavior problems and many receive it through the Special Education Department of the Toronto Board. (These programs have been defined as integrated in this study because they focus on learning and behavior needs and not on physical/health needs.) It is with respect to meeting these needs of PH/HI children that the Toronto Board is especially well prepared and competent. According to the parents and teachers, a few more PH/HI children could use individual programs and/or special education classes and it is interesting to note that the parents, in particular, frequently saw the solution to various problems to be a "teacher with special training" who, of course, could be a special education teacher.

REFERENCES

REFERENCES

Anderson, E. M. The disabled school child: A study of integration in primary schools. London: Methuen & Co. Ltd., 1973.

Billings, H. K. An exploratory study of the attitudes of noncrippled children toward crippled children in three selected elementary schools. Journal of Experimental Education, 1963, 31, pp. 381-387.

Blishen, B. R., & Carroll, W. K. Sex differences in a socioeconomic index for occupations in Canada. (Research notes). The Canadian Review of Sociology and Anthropology, 1978, 15(3), pp. 352-371.

Blishen, B. R., & McRoberts, H.A. A revised socioeconomic index for occupations in Canada. The Canadian Review of Sociology and Anthropology, 1976, 13(1), pp. 71-79.

Bowra, B. Integration of special education students at Sir Ernest MacMillan School. Paper presented at the Annual Conference of the Ontario Educational Research Council, Toronto, November, 1980.

Coopersmith, S. The Antecedents of self-esteem. San Francisco: Freeman, 1967.

Cope, C., & Anderson, E. M. Special units in ordinary schools: An exploratory study of special provision for disabled children. London: The University of London Institute of Education, 1977.

Federlein, A. C. A year long study of the frequency of play interactions of handicapped preschoolers in mainstreamed and segregated classrooms. Paper presented at the Annual International Convention of the Council for Exceptional Children, Philadelphia, April, 1980.

Goldstein, S. B. The effect of mainstreaming on self-esteem in adolescents and young adults with spina bifida. Spina Bifida Therapy, 1980, 2(4), pp. 309-319.

Gordon, R., & Schwartz, B. Pilot study of the efficacy of mainstreaming integration. Paper presented at the Annual Conference of the Council of Exceptional Children, Philadelphia, April, 1980.

Hogan, T. P., Farr, R. C., Prescott, G. A., & Balow, I. H. Metropolitan achievement tests, mathematics instructional tests. Teacher's manual for administering and interpreting. Harcourt Brace Jovanovich, Inc., 1978.

Hull, C. H., & Nie, N. H. SPSS update: New procedures and facilities for releases 7 and 8. New York: McGraw-Hill, 1979.

Jaworski, A. P. *The effects of the mainstreaming experience on the self-concept of physically handicapped young children*. Ph.D. dissertation, Wayne State University, 1979.

Jones, S. N. *Case studies and observation of four mainstreamed preschool children*. Ph.D. dissertation, University of Michigan, 1979.

Jorgensen, I. S. (Ed.). *Special education in Denmark*. Copenhagen: Det Danske Selskab, 1970.

Knight, T. W., & Goodlet, M. *Making it happen*. A television programme presented at the Annual Conference of the Ontario Educational Research Council, Toronto, December, 1981.

Larter, S. *The measurement and comparision of small group skills and sociability in schools differing in program and architectural openness*. Ph.D. thesis, University of Toronto, 1976.

Lazure, D. (Ed.). *The CELDIC report: One million children*. Toronto: Crainford, 1970.

Lindon, R. L. The Pultibec system for the medical assessment of physically handicapped children. *Developmental Medicine and Child Neurology*, 1963, *5*, pp. 125-145.

MagGinitie, W. H. *Gates MagGinitie reading tests: Canadian edition. Teacher's manual*. Nelson Canada Limited, 1980.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. *Statistical package for the social sciences* (2nd ed.). New York: McGraw-Hill, 1975.

Ontario Ministry of Education, Bill 82: An Act to Amend the Education Act, 1974. 31st Legislature, 4th Session, Ontario, 1980. Toronto: J. C. Thatcher, Queen's Printer for Ontario, 1980.

Rapier, J., Adelson, R., Carey, R., & Croke, K. Changes in children's attitudes towards the physically handicapped. *Exceptional Children*, 1972, *39*(3), pp. 219-223.

Raven, J. C. *Guide to the standard progressive matrices*. London: H. K. Lewis & Co. Ltd., 1960.

Stephens, T. M., & Braun, B. L. Measures of regular classroom teachers' attitudes toward handicapped children. *Exceptional Children*, 1980, *46*(4), pp. 292-294.

Swedish National Board of Education. *Special education in Sweden*. Stockholm: Swedish National Board of Education, 1967.

Thompson, T. L. *Communication between handicapped and nonhandicapped children: A network analysis of a mainstreaming program*. Paper presented at the Annual Meeting of the Speech Communication Association, New York, 1980.

Toronto Board of Education. Fact sheet No. 6: Special education. Toronto: The Board of Education for the City of Toronto, January, 1979.

Toronto Board of Education. Fact sheet No. 16: Special programs (physically handicapped). Toronto: The Board of Education for the City of Toronto, January, 1979.

Toronto Board of Education. Fact sheet No. 22: Special program (communications). Toronto: The Board of Education for the City of Toronto, January 1979.

United States Public Law 94-142. Education for All Handicapped Children Act of 1975. 94th Congress, 1st Session, 1975.

U. S. Office of Education. Education of handicapped children: Implementation of Part B of the Education of the Handicapped Act. Federal Register, 1977, 42: 42496.

VanPutte, A. W. Relationship of school setting to self-concept in physically disabled children. Journal of School Health, 1979, 49(10), pp. 576-578.

Warnock, H. M. Special educational needs: Report of the committee of enquiry into the education of handicapped children and young people. London: Her Majesty's Stationery Office, 1978.

Wechsler, H., Suarez, A. C., & McFadden, M. Teachers' attitudes toward the education of physically handicapped children. Implications for the implementation of Massachusetts Chapter 766. Journal of Education, 1975, February, pp. 17-24.

Wright, E. N., & Dhanota, A. S. The grade nine student survey: Fall 1980. Toronto: The Board of Education for the City of Toronto, Research Department, 1981 (#161).

APPENDIX A

REVIEW OF RESEARCH STUDIES

REVIEW OF RESEARCH STUDIES

The research studies which are reviewed in this section mostly involve physically handicapped children.

Two major research studies on the integration of disabled children have recently been completed in Britain. The aim of the first study (Anderson, 1973) which was funded by the National Fund for Research into Crippling Diseases was to investigate the question of the integration of physically handicapped children of normal intelligence in ordinary primary schools. The study (Anderson, 1973, pp. 19-20) singled out the following five aspects of the question:

(1) The characteristics, especially in terms of type and severity of handicap, of those physically handicapped children who were being educated in ordinary schools.

(2) The process by which those children came to be placed in ordinary schools and the feelings of their parents and teachers about the placement.

(3) The social and emotional adjustment of the children (including social relationships, social competence and the extent of emotional and behavioral disorders) especially in comparison with their non-handicapped classmates.

(4) The academic attainments of the children, again in relation to those of their non-handicapped peers.

(5) The nature and the adequacy of the special provisions made for physically handicapped children in ordinary schools.

Some of the major findings of the study (Anderson, 1973, pp. 288-304) were:

(1) The majority of the parents of the disabled children preferred ordinary school placement because they believed the children would obtain a better education and would benefit socially.

(2) The amount and quality of social integration between handicapped and non-handicapped children both inside and outside school was very encouraging.

(3) On the whole, the children, with the exception of some of the neurologically abnormal group, were as independent as their handicaps allowed.

(4) The majority of the children appeared to be making a good adjustment to their disabilities.

(5) All the children were rated as "well adjusted" or "fairly well adjusted" on the basis of their scores on a ten-item scale which took into account all the main aspects of social and emotional adjustment considered in the study.

(6) Most of the children with purely physical disorders were well able to cope with and to benefit from the normal curriculum of an ordinary school. Those children with neurological abnormalities were more likely to require extra help within the ordinary school.

(7) The teachers would have welcomed more information and advice.

(8) The special provisions made in ordinary schools for the physically handicapped children varied enormously from one local authority to another. In some schools adaptations needed to be made to help children with problems either of mobility or of toileting, and the need for toilet privacy was often not realized. Few special educational aids were being used. Teachers were not always aware that a need existed, or of what equipment was available or how it could be obtained.

(9) Given special provisions, it is possible to offer even severely handicapped children a satisfactory

> education in an ordinary school. Given commitment to the idea of integration it is possible to increase substantially the proportion of disabled children being educated in ordinary schools and to offer them facilities of the same quality as those at present provided in special schools.

The main purpose of the second British research study (Cope and Anderson, 1977, p. 107) was to discover whether special provision for groups of physically handicapped children within ordinary schools, in particular unit provision, could meet the children's needs as effectively as special school provision. The investigators looked at educational, medical/physical, and social needs of children at the infant, junior and secondary levels. The main finding of the study (Cope and Anderson, 1977, pp. 115-116) was that even the most unsuccessful units were able to offer children (with a degree of physical and intellectual impairment comparable to that of the bulk of children in special schools) a satisfactory learning environment, good physical facilities, and a supportive yet stimulating social situation. In addition, the best units did more than offer facilities similar to those of special schools. They offered the physically handicapped children many opportunities for developing either real friendships or, at least, understanding relationships with their non-handicapped peers. They also gave them opportunities to participate in regular lessons to varying degrees. Such an opportunity was particularly valuable to children of secondary age, since it meant that a far greater range of subjects, taught by specialist teachers, was available to them than to most special school children. However, the units varied considerably in their effectiveness. The authors felt that the findings of their study suggested that a definite shift in policy could and should be made. They suggested that instead of concentrating resources on special schools, the aim should be to set up a system of special provision for groups of physically handicapped children within carefully selected ordinary schools at both the primary and secondary level.

The research studies which have been done in United States related to the integration of physically handicapped children are not so extensive in nature as the two British studies. Billings (1963) found that the attitudes of non-handicapped children toward physically handicapped children were significantly more unfavourable than their attitudes toward non-handicapped children. Rapier, Adelson, Carey and Croke (1972) made an assessment of changes in attitude of 152 elementary school children toward orthopedically handicapped children as a result of an integrated school experience in California. After integration, non-handicapped children had developed a more positive attitude toward the orthopedically handicapped. Wechsler, Suarez and McFadden (1975) conducted a survey to determine the readiness of school teachers to implement Chapter 766 of the Acts of 1972 of the Massachusetts General Laws, which calls for the integration of handicapped children into the regular classroom. The survey findings indicated that most teachers in regular classrooms, especially those who had had experience teaching physically handicapped children, had positive attitudes toward the education and emotional adjustment of physically handicapped children. Stephens and Braun (1980) also studied teachers' attitudes. They asked 11,034 regular classroom teachers of children in kindergarten through grade 8 to respond to a questionnaire concerning their willingness to accept educable mentally handicapped, physically handicapped, and emotionally handicapped students into their classrooms. Among findings were that primary and middle grade teachers were more willing to integrate handicapped students than were teachers of grades 7 and 8 and that those teachers who had taken courses in special education were more willing to accept handicapped students in their classes than were those who had not taken such courses.

Three recent United States' studies, VanPutte (1979), Jaworski (1979) and Goldstein (1980) examined the self-concept of physically disabled children and reported similar findings. VanPutte's pilot study found no relationship between school setting (mainstreamed versus sheltered) and self-concept in 20 school-age children with myelomeningocele (Spina Bifida Cystica) while Jaworski found no significant difference in the mean self-concept scores of mainstreamed and segregated physically handicapped 3 to 7 year old children and no significant difference in the mean self-concept scores of physically handicapped and non-handicapped 3 to 7 year old children. Goldstein's study involving 54 spina bifida adolescents and young adults compared the self-esteem of disabled persons educated in special schools with that of disabled persons who had been mainstreamed. The results indicated that school type is not a significant influence on self-esteem in disabled individuals. The amount of perceived parental rejection and arousal of anxiety appear to be the main influence on self-esteem.

In another United States' study, Gordon and Schwartz (1980) questioned the benefits of mainstreaming the preschool handicapped child. They found that normal children in mainstreamed classes interacted significantly more often and had more sustained reciprocal interaction than did mainstreamed handicapped children and that mainstreamed handicapped children interacted with materials significantly more than handicapped children in special classes but the children in special settings had significantly more interactions indicating completion and extension of the materials. On a somewhat similar topic, Federlein (1980) undertook a study to observe the frequency of play of 30 preschool handicapped children (physically, emotionally, or hearing impaired) in mainstreamed and segregated settings. The results showed a higher frequency of play in the mainstreamed preschool classroom and more frequent adult initiated play in the segregated classrooms. Thompson (1980) also studied the social effectiveness of mainstreaming orthopedically handicapped children. Data were collected on the network structures of the social relationships among handicapped and non-handicapped children in first, third and sixth grade classrooms. One of the six hypotheses was supported indicating that orthopedically handicapped children were less integrated into overall communication networks. Those children who were mainstreamed had more contact with peers outside of school than those who were not mainstreamed.

And, reference should be made to four American case studies (Jones, 1979) of mainstreamed preschool children - a physically impaired girl, a hearing inpaired boy, a learning disabled boy, and a speech/language impaired girl. Jones found that the four children required more teacher time than non-exceptional children but that the percentage of time was less than the teachers had anticipated.

In Canada, there seems to have been no formal research on the topic of integrating physically handicapped children into regular classrooms. However, at the 1980 Ontario Educational Research Council (OERC) conference, a paper was presented by Mr. Bowra, Principal of Sir Ernest MacMillan Public School in Burlington, on the integration of students with special education needs. He described his school's experience with integrating such students, three of whom were physically handicapped. With respect to the physically handicapped children, he reported (in a telephone conversation on December 1, 1981) that the experience of integration had raised the children's level of achievement and had provided the regular students with an opportunity to interact with and understand the problems of the disabled children.

At the 1981 OERC conference, there was a presentation by Mr. Knight, Vice-Principal of Indian Creek Road Public School in Chatham and Mrs. Goodlet of the Kent County Board entitled "Making It Happen" which included a television program dealing with the integration of special education pupils into regular classrooms. With respect to the integration of the physically handicapped children, Mr. Knight reported that it was successful and had been done with a minimum of cost. The extra costs were for two paraprofessionals, addition of ramps, conversion of washrooms, an electric typewriter and adjustable desks.

APPENDIX B

TORONTO BOARD OF EDUCATION FACT SHEETS

NOS. 6, 16 & 22

Education Toronto – one of a series of fact sheets on the school system operated by the Toronto Board of Education

SPECIAL EDUCATION

Revised
JANUARY 1979.

Special education involves a wide variety of teaching programs designed for "exceptional" students attending Toronto elementary and secondary schools.

These programs consist of self-contained classes, resource and learning centres, and individual or group instruction on a withdrawal or itinerant basis. All programs are open-ended and the progress of every student is evaluated at regular intervals to ensure that his or her needs are being met.

This Fact Sheet includes a statistical summary of the various types of Special Education programs operated by the Toronto Board.

INTEGRATION

The philosophy of the Special Education Department is to integrate students in regular programs, whenever feasible. Integration is usually a gradual process as the student becomes less dependent on Special Education support and learns to cope successfully in a regular classroom. There are, however, students whose physical, emotional, and intellectual needs are such that they cannot learn effectively in a regular class, and they require the support of a self-contained class.

INDIVIDUALIZED INSTRUCTION

Special Education class size depends on the type of program. Emphasis is on an individual program which allows the student to work at an appropriate level and pace. While academic work must be challenging, it must also be within the student's capabilities.

ITINERANT TEACHERS

Special Education itinerant teachers are available to assist classroom teachers of students with educational problems in the areas of vision, hearing, speech, behaviour, and language and learning disabilities.

SPECIAL SCHOOLS

Three special schools provide learning situations in which children who are unable to benefit fully from a regular school environment can develop to their potential. They are: Metropolitan Toronto School for the Deaf (for the hearing impaired), Sunny View School and Bloorview School (for the physically and orthopedically handicapped).

See Board Fact Sheets No. 16 – Special Programs (Physically Handicapped) and No. 22 – Special Programs (Communications), as well as booklets "Metropolitan Toronto School for the Deaf" and "Sunny View School".

SPECIAL EDUCATION TEACHERS

Special Education Teachers have appropriate qualifications in their specialties, successful teaching experience in grade classes, an objective viewpoint, an optimistic outlook – plus much understanding.

These teachers are encouraged to continue their professional development through participation in further education and in-service programs in order to better meet the needs of exceptional children.

SPECIAL EDUCATION STAFF

Two supervisory officers in Special Education head a consultative staff of 16 who work directly with approximately 530 Special Education teachers in the Toronto Board's various programs and classes.

FOR MORE INFORMATION

Michael Choma, Assistant Superintendent, Special Education, 598-4931, ext. 672.

R. James Youngson, Chief Co-ordinator, Special Education, 598-4931, ext. 671.

Related Fact Sheets

Other Fact Sheets give further information on the Board's Special Education Programs.

Fact Sheet No. 16 – describes special programs for physically handicapped students.

Fact Sheet No. 17 – describes special programs for students with learning disabilities.

Fact Sheet No. 22 – describes special programs for students with communication problems.

Copies of all Fact Sheets are available from the Special Education Department, or from Information and Publications, Toronto Board of Education, 155 College Street, Toronto, Ontario, M5T 1P6. Telephone 598-4931, ext. 133.

SPECIAL EDUCATION PROGRAMS
As of January 1, 1979

Type of Program	*Placement Criteria*	*Location*	*Number of Teachers*
S.P. (Behavioural)	Special learning disabilities, emotional, behavioural, and or organic from 5 years of age	In the Public Schools Itinerant Teacher Prog. In the Secondary Schools	21 5.5 5.5
*S.P. (Deaf)	Profoundly deaf from 3 years of age	Metro School for the Deaf Forest Hill P.S. John Fisher P.S. John Wanless P.S. In the Secondary Schools	23 2 2 2 13
S.P. (Gifted and Enrichment)	Students with special interests, talents or abilities Saturday Morning Classes, Intellectually gifted students selected from grades 5 to 13 in the Public and Secondary Schools	In the Public & Secondary schools; club activities & option subjects Castle Frank High School, Northern Secondary & decentralized locations	40 Instructors
*S.P. (Health)	Special environment for reasons of health 6 to 14 years of age	Charles G. Fraser; Church St., Osler, & Wilkinson Public School	9
*S.P. (Hearing)	Severely hard to hearing from 6 years of age	In the Public Schools Itinerant Teacher Prog. In the Secondary Schools	4 12 5
S.P. (Home Instruction)	Physical, emotional and/or behavioural reasons from 6 years of age	In the home or Public School	As Required
*S.P. (Hospital and Institutional)	Residential 6 to 18 years of age	In various Hospitals & Institutions – Public Secondary	29.5 14.5
*S.P. (Language)	Severe language disorder from 4 years of age	In the Public Schools Itinerant Teacher Prog. In the Secondary Schools	13 1 1
S.P. (Learning Centre)	Less severely handicapped in the behavioural, perceptual or educationally retarded areas	In the Public Schools	25.5
*S.P. (Orthopedic)	Physical handicapped 5 to 18 years of age	Bloorview School Sunny View School In the Secondary Schools	11 20 2
S.P. (Perceptual)	Learning disability problems (neurological and perceptual) from 6 years of age	In the Public Schools Itinerant Teacher In the Secondary Schools	33 6 18.5
S.P. (Primary) (Junior) (Senior)	Educable mentally retarded, slow learning and/or educationally retarded 7 to 14 years of age	Junior Public Schools Senior Public Schools	105 66.5
S.P. (Reading)	Non readers of an average or better intelligence. 7 to 12 years of age	In the Public Schools In the reading Clinics	5 36
S.P. (Speech)	Speech difficulties	In the Public and Secondary Schools	15.5
S.P. (Vision)	Severely limited vision	Jesse Ketchum Public School	1

S.P. – Special Program
*Metro-wide attendance; programs operated by the Toronto Board of Education.

Education Toronto – one of a series of fact sheets on the school system operated by the Toronto Board of Education

Revised
JANUARY 1979

SPECIAL PROGRAMS (PHYSICALLY HANDICAPPED)

Every effort is made to integrate physically handicapped students into local schools which can accommodate their needs. For those students who require special support facilities, there are both elementary and secondary school programs available at six locations in the Metropolitan Toronto area. They are: Sunny View, Bloorview, and Lyndhurst, West Toronto and West Park Secondary Schools in Toronto and Sir William Osler Vocational School in Scarborough.

At these centres, in addition to the regular academic program, there are health care services including physical, occupational and speech therapy.

Admission

Special Programs (Physically Handicapped) are operated by the Toronto Board of Education for students throughout the Metropolitan Toronto area. There is also a program at Sir William Osler Vocational School in Scarborough. Application for admission to these special centres(excepting Bloorview and Lyndhurst which are residential) is made through the local Department of Health. An admission committee made up of educational, medical and therapy staff assesses a student's needs and, if appropriate, approves placement. Parents are consulted during the process and prior to any decision being made. If there is any doubt about the advisability of enrolling a student in these schools, a trial attendance period may be recommended.

Transportation to and from these centres is arranged through the local board of education at no cost to parents.

Students are evaluated on a regular basis. When a student is physically able to be more independent, and appropriate facilities are available in the local school, his/her return to that school is arranged through the Special Education Department of the local School Board.

SUNNY VIEW SCHOOL (Kindergarten to Grade 8)

Opened in 1963 by the Toronto Board of Education, Sunny View School is located in a pleasant residential community central to the Metropolitan area.

Approximately 200 students are enrolled at Sunny View. They arrive daily by special vehicles and enter the school through a large reception foyer which provides easy access. The off-street driveway approaching the entrance is designed with the safety of students in mind.

During the school day, the student's academic and physical requirements are met by an integrated team of specialists from the Board of Education and related health fields. Sunny View's teachers are trained in special techniques and procedures, and with the help of therapists, psychologists, parents and educational consultants, they plan individualized educational programs to meet the varying needs of the students.

Additional specialized programs are available for children with limited vision, hearing loss, language and reading disabilities.

The property around the school has paved pathways which wind through glades, making it easy for children using wheelchairs or crutches to be active out of doors. They take part in barbeques, tenting, miniature golf, baseball, and nature studies. Some of these activities take place in a glass-domed 'adventure playground'.

Special interest activities include ceramics, photography, grooming, choir, cooking, Orff music training,horseback riding, swimming, drama, and crafts of various kinds.

Health-Related Services

The therapy staff works with students to help them become as independent as possible. Students are assessed by the physical and occupational therapists, and are placed on appropriate treatment programs. A full-time speech therapist works with students with speech and language problems.

Sunny View's full-time nurse, provided by the Toronto Department of Public Health, is responsible for medications, and for co-ordinating medical and admission clinics conducted by the orthopedic consultant. As well as giving medical orientation to the staff, she regularly monitors clinic and assessment meetings. The nurse, therapists, and teachers maintain close contact with students' families.

Personal health care needs of students are attended to by Health Care Assistants. The school's male helpers, in addition to driving for field trips, assist in lifting and moving students and their specialized equipment around the building.

BLOORVIEW SCHOOL

Formerly located on Bloor Street, Bloorview School is the education complex attached to the newly-opened Bloorview Children's Hospital. This residential facility is situated on a beautifully landscaped ten-acre ravine lot in North York. The school is for children from the Province of Ontario who require a live-in setting and is operated by the Toronto Board of Education.

Bloorview's program is similar to that of Sunny View. It accommodates approximately 70 children ranging in age from 4 to 21 years. A secondary school unit is included for those unable to attend other secondary facilities.

In addition to self-contained classrooms, Bloorview has a gymnasium, pool, library, and a special resource program.

Application for entrance is made through the Hospital's Social Service Department. An admission committee made up of hospital and school personnel meets with parents to discuss admission.

Bloorview's academic staff works closely with the hospital departments, including therapy, social service, nursing, and recreation in order to ensure that a complete program is provided.

SECONDARY SCHOOL PROGRAMS

Students graduating from elementary programs who require health-care support may continue their special education program at West Toronto or West Park Secondary Schools in Toronto or Sir William Osler Vocational School in Scarborough.

Well-qualified teachers provide assistance in special resource rooms and credit courses are chosen to meet students' interests and needs. The support services of an occupational and physical therapist is also provided.

The West Toronto program is for students who wish to obtain credits towards university or college entrance, while West Park and Sir William Osler courses are designed to help less academically inclined students with the practical aspects of living.

LYNDHURST HOSPITAL SCHOOL

This is a new, well-equipped hospital for adults, who as a result of accident or disabling illness, are confined to wheelchairs. The Toronto Board of Education provides a teacher for all patients who wish to further their education while they are hospitalized.

FOR MORE INFORMATION:

Special Education Department

Toronto Board of Education, 155 College Street,
Toronto, Ontario, M5T 1P6.

Michael Choma, Assistant Superintendent, Special Education, phone 598-4931, ext. 672.

Mrs. Betty Chandorkar, Co-ordinator, Special Programs (Physically Handicapped), 598-4931, ext. 676.

Miss Anne Fraser, Principal on Special Assignment, Special Program (Hospital and Institutional), 598- 4931, ext. 675.

Sunny View School

George Jenner, Principal, 469-7706
450 Blythwood Road, Toronto, M4N 1A9

Bloorview School

Miss Glenda Mercer, Principal, 494-5754
25 Buchan Court, Willowdale M2J 4S9
(Leslie and Sheppard area)

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Education Toronto – one of a series of fact sheets on the school system operated by the Toronto Board of Education

SPECIAL PROGRAM (COMMUNICATIONS)

Revised
JANUARY 1979.

The Toronto Board of Education co-ordinates a variety of special programs for students with communication problems. These programs are located in the Metro boroughs as well as in the City of Toronto itself, and are available to students from both the public and the separate school systems of Metropolitan Toronto.

SPECIAL PROGRAM (DEAF)

The basic purpose of this program is to meet the needs of Metropolitan Toronto students who are diagnosed as profoundly deaf. The program is also designed to assist those with a severe to profound hearing loss which has restricted development of speech and ability to use language. It is staffed by specially trained teachers who work in both elementary and secondary schools. The program serves about 220 elementary school students and 120 secondary school students.

Elementary Program

Auditory/Oral Classes for the program are located in the following Metro Toronto elementary schools:

Etobicoke:
Buttonwood Hill Jr. Sch., 100 Allanhurst Dr.
Scarborough:
Clairlea Public School, 25 Rosalind Cres.
Toronto:
Metropolitan Toronto School for the Deaf, 43 Millwood Rd.
Forest Hill Public School, 78 Dunloe Rd.

The oral methods used in these classes encourage students to develop residual hearing by providing training which assists them in learning to listen. Also, the development of language in all its aspects (understanding, speaking, speech reading, reading, writing) is stressed in every subject.

In addition to the above mentioned auditory/oral classes, there are Total Communication Classes at John Wanless Public School, 250 Brookdale Avenue, Toronto, and John Fisher Public School, 40 Erskine Ave., Toronto. Here the languages of signs and fingerspelling are taught as adjuncts to the auditory/oral speech.

Secondary Program:

Special Program (Deaf) classes are held in the following Metropolitan Toronto secondary schools:

Scarborough:
Osler Vocational School, 1050 Huntingwood Dr.
Toronto:
Castle Frank High School, 711 Bloor St. E.
Heydon Park Secondary School, 11 St. Anne's Rd.
Northern Secondary School, 851 Mt. Pleasant Rd.
Parkview Secondary School, 1 Danforth Ave.
Danforth Technical School, 840 Greenwood Ave.

Teachers of the deaf provide instruction in core subjects. Students are integrated into regular classes for both academic and vocational subjects to meet their individual needs.

Parent Guidance Program

The Parent Guidance Program offers free assistance, guidance, and training for parents of young hearing-impaired children in Metropolitan Toronto.

In the home-like atmosphere in the centres at the Metropolitan Toronto School for the Deaf and Clairlea Public School parents are given instruction in how to develop language with their hearing-impaired children. All hearing-impaired children (including the children of non-English speaking and deaf parents, and those with multi-handicaps) are seen in individual tutorial sessions. The parent brings the child to the centre once a week for one hour. Guidance and support are provided for parents who express their own feelings, attitudes and concerns.

The program also includes monthly group sessions where parents, relatives and friends are encouraged to share their feelings and experiences. Guest speakers are often brought in, and films are used to give visual help for non-English-speaking parents.

SPECIAL PROGRAM (HEARING)

This program is for hard-of-hearing students in Metropolitan Toronto who have moderate to severe hearing losses. Seventeen Special Program (Hearing) classes serve over 170 students in elementary and secondary schools. Whenever possible these students are integrated into regular classes. Because a child with a hearing loss usually has a language deficit, programs place a great emphasis on language development and speech training.

Special Program (Hearing) classrooms are acoustically treated; they also are equipped with group and individual hearing aids to provide maximum benefit from sound amplification.

Elementary classes are located in the following Metro Toronto elementary schools:

East York:
Presteign Heights Public School (Primary and Junior) 2570 St. Clair Ave. E.
Etobicoke:
Humber Valley Village Sch. (Jr.), 65 Hatfield Rd.
Rosethorn Public Sch. (Primary), 2 Remington Dr.
North York:
Cameron Ave. Public School (Primary and Junior), 211 Cameron Ave., Willowdale.
Scarborough:
General Brock Public School (Jr.), 140 Chestnut Cres.
Lord Roberts (Primary), 165 Lord Roberts Dr.
Toronto:
Annette P.S., (Jr. & Intermediate), 265 Annette St.
Forest Hill Public School (Junior), 78 Dunloe Road
Glenview P.S. (Sr.), 401 Rosewell Ave.
Danforth Technical School, 840 Greenwood Ave.
Northern Secondary Sch., 851 Mt. Pleasant Rd.
West Park Secondary Sch., 1515 Bloor St. W.
Northern Secondary Sch., 851 Mt. Pleasant Rd.
West Park Secondary Sch., 1515 Bloor St.W.

Itinerant Teacher Service

The Itinerant program is designed to assist students who have a significant hearing loss but are able to remain in regular school classes with the help of an itinerant teacher. These specially trained teachers visit elementary and secondary schools and work with individual students, focusing on auditory training, language and speech. Students may be withdrawn from regular classes for two or three sessions each week, depending on need.

The Itinerant teacher stays in close contact with the student's home teacher, principal, and the Special Education consultant. If a student needs more help than the itinerant teacher can provide a recommendation for placement in a Special Program may be made. Parents are encouraged to have their child's hearing assessed and their hearing aids evaluated regularly.

Approximately 100 students throughout Metro are seen by itinerant teachers on a regular basis and at least 250 are seen on a follow-up basis.

Amplification devices (radio frequency aids) are available for individual students working at grade level in regular classrooms throughout Metropolitan Toronto.

SPECIAL PROGRAM (LANGUAGE)

Special Program (Language) is for Metropolitan Toronto students who have a significant deficit in language development. This shows itself either by failure in learning to speak, or by extreme difficulty in understanding and expressing ideas through speech. This highly specialized program is staffed by teachers with successful experience in both regular and special education programs, and with specific training in dealing with language disabilities.

These programs are located at:
Bedford Park Public School, 81 Ranleigh Ave.,
Parkview Secondary School, 1 Danforth Ave.
Maurice Cody Public School, 364 Belsize Dr.

An *itinerant teacher* is also available to help those students in regular classrooms who require specific language training.

A *special diagnostic class* is located at Bedford Park Public School to assess young children with significant communication difficulties. This program provides a multi-disciplinary assessment of pre-school and school-aged children with extreme language deficits.

The program at Maurice Cody utilizes total communication to develop communication skills.

SPECIAL PROGRAM (SPEECH)

Special Program (Speech) is available in all Junior and Senior schools in Toronto for students with defective or deviant speech and delayed language development. It is also available in Toronto secondary schools upon request.

Speech defects may be characterized by defects of articulation (including distortions, substitutions or omissions of speech sounds), defects of voice production, defects of rhythm such as stuttering, cleft palate speech, speech associated with cerebral palsy, and speech defects related to impaired hearing and delayed speech development.

All grade 1 students are screened by a Special Program (Speech) teacher in the fall of every school year. Those in need of assistance are included in speech programs as space becomes available. Referrals may be made by teachers, the public health nurse, a psycho-educational consultant, dentist, school doctor, social worker, special education consultant, or the child's parents. Students continue to receive this assistance until their defect is corrected, or until such time as the program is no longer helpful.

Referral Procedures:

(1) Requests for admission to programs for hearing-impaired children are processed through the Hearing Conservation Centre, (Department of Public Health) and the Special Education Department, Toronto Board of Education.

(2) Applications for Special Program (Language) are directed through the local School Board's Special Education Department to the Special Education Department of the Toronto Board of Education. Requests for placement are considered by an Admission Board.

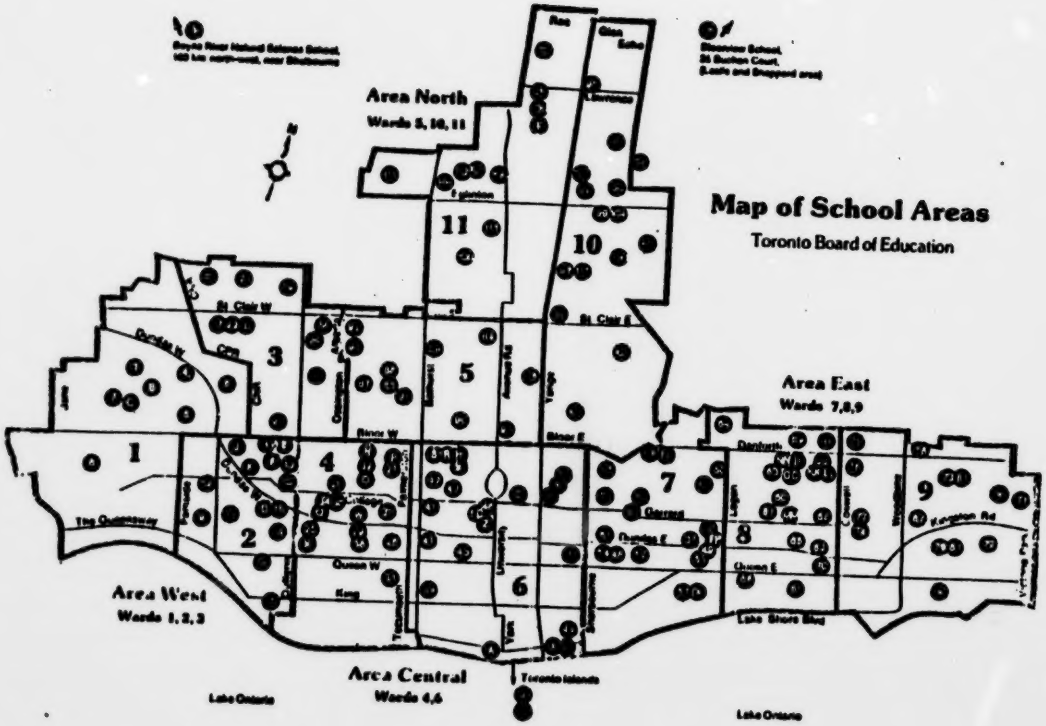
(3) In the City of Toronto, requests for speech assessment and/or program should be directed through the school principal to the Special Education Department.

FOR ADDITIONAL INFORMATION

Special Education Department, Toronto Board of Education, 155 College Street, Toronto, Ontario M5T 1P6 – Telephone 598-4931. Michael Choma, Ass't. Superintendent, Special Education, ext. 672.
Stanley Draffin, Coordinator, Special Program (Communications) ext. 67
Miss Rhena Petch, Assistant Coordinator, Special Program (Communications) ext. 677.

APPENDIX C

MAP OF ADMINISTRATIVE AREAS
OF
THE TORONTO BOARD OF EDUCATION


Map of School Areas

Toronto Board of Education

Boyne River Natural Science School,
100 km north-west, near Shelburne
35 Buchan Court,
(Leslie and Sheppard area)
Area North
Wards 5, 10, 11
Area West
Wards 1, 2, 3
Area Central
Wards 4, 6
Area East
Wards 7, 8, 9
1
2
3
4
5
6
7
8
9
10
11
St Clair W
St Clair E
Eglinton
Lawrence
Dundas W
Bloor W
Bloor E
Danforth
Gerrard
Dundas E
Queen W
Queen E
King
Kingston Rd
Lake Shore Blvd
The Queensway
Toronto Islands
Lake Ontario
Lake Ontario

APPENDIX D

IOX SELF-APPRAISAL INVENTORY

IOX SELF APPRAISAL INVENTORY

NAME: ______________________

I ___ ___ ___ ___ 6

9 2 ___ 10

DIRECTIONS:

ON THE FOLLOWING PAGES IS A SERIES OF STATEMENTS PEOPLE SOMETIMES USE TO DESCRIBE THEMSELVES. PLEASE READ EACH STATEMENT CAREFULLY AND DECIDE WHETHER OR NOT IT IS TRUE FOR YOU.

IF YOU THINK A STATEMENT IS TRUE FOR YOU, CIRCLE THE LETTER "T".

IF YOU THINK A STATEMENT IS FALSE FOR YOU, CIRCLE THE LETTER "F".

THERE ARE NO RIGHT OR WRONG ANSWERS, SO RESPOND TO EACH STATEMENT AS HONESTLY AS YOU CAN.

	TRUE	FALSE	
1. I LIKE TO MEET NEW PEOPLE............................	T	F	11
2. I CAN DISAGREE WITH MY FAMILY........................	T	F	
3. SCHOOL WORK IS FAIRLY EASY FOR ME....................	T	F	
4. I AM SATISFIED TO BE JUST WHAT I AM..................	T	F	
5. I WISH I GOT ALONG BETTER WITH OTHER CHILDREN........	T	F	
6. I OFTEN GET IN TROUBLE AT HOME.......................	T	F	
7. I USUALLY LIKE MY TEACHERS...........................	T	F	
8. I AM A CHEERFUL PERSON...............................	T	F	
9. OTHER CHILDREN ARE OFTEN MEAN TO ME..................	T	F	
10. I DO MY SHARE OF WORK AT HOME.......................	T	F	
11. I OFTEN FEEL UPSET IN SCHOOL........................	T	F	
12. I OFTEN LET OTHER KIDS HAVE THEIR WAY...............	T	F	
13. MOST CHILDREN HAVE FEWER FRIENDS THAN I DO..........	T	F	
14. NO ONE PAYS MUCH ATTENTION TO ME AT HOME............	T	F	
15. I CAN ALWAYS GET GOOD GRADES IF I WANT TO...........	T	F	
16. I CAN ALWAYS BE TRUSTED.............................	T	F	
17. I AM EASY TO LIKE...................................	T	F	
18. THERE ARE TIMES WHEN I WOULD LIKE TO LEAVE HOME.....	T	F	
19. I FORGET MOST OF WHAT I LEARN.......................	T	F	
20. I AM POPULAR WITH KIDS MY OWN AGE...................	T	F	30

	TRUE	FALSE	
21. I AM POPULAR WITH GIRLS.............................	T	F	31
22. MY FAMILY IS GLAD WHEN I DO THINGS WITH THEM........	T	F	
23. I OFTEN VOLUNTEER IN SCHOOL.........................	T	F	
24. I AM A HAPPY PERSON.................................	T	F	
25. I AM LONELY VERY OFTEN..............................	T	F	
26. MY FAMILY RESPECTS MY IDEAS.........................	T	F	
27. I AM A GOOD STUDENT.................................	T	F	
28. I OFTEN DO THINGS THAT I'M SORRY FOR LATER..........	T	F	
29. OLDER KIDS DO NOT LIKE ME...........................	T	F	
30. I BEHAVE BADLY AT HOME..............................	T	F	
31. I OFTEN GET DISCOURAGED IN SCHOOL...................	T	F	
32. I WISH I WERE YOUNGER...............................	T	F	
33. I AM ALWAYS FRIENDLY TOWARD OTHER PEOPLE............	T	F	
34. I USUALLY TREAT MY FAMILY AS WELL AS I SHOULD.......	T	F	
35. MY TEACHER MAKES ME FEEL I AM NOT GOOD ENOUGH.......	T	F	
36. I ALWAYS LIKE BEING THE WAY I AM....................	T	F	
37. MOST PEOPLE ARE MUCH BETTER LIKED THAN I AM.........	T	F	
38. I CAUSE TROUBLE TO MY FAMILY........................	T	F	
39. I AM SLOW IN FINISHING MY SCHOOL WORK...............	T	F	
40. I AM OFTEN UNHAPPY..................................	T	F	50

-4-

		TRUE	FALSE	
41.	I AM POPULAR WITH BOYS.............................	T	F	51
42.	I KNOW WHAT IS EXPECTED OF ME AT HOME..............	T	F	
43.	I CAN GIVE A GOOD REPORT IN FRONT OF THE CLASS.....	T	F	
44.	I AM NOT AS NICE LOOKING AS MOST PEOPLE............	T	F	
45.	I DON'T HAVE MANY FRIENDS..........................	T	F	
46.	I SOMETIMES ARGUE WITH MY FAMILY....................	T	F	
47.	I AM PROUD OF MY SCHOOL WORK.......................	T	F	
48.	IF I HAVE SOMETHING TO SAY, I USUALLY SAY IT.......	T	F	
40.	I AM AMONG THE LAST TO BE CHOSEN FOR TEAMS.........	T	F	
50.	I FEEL THAT MY FAMILY ALWAYS TRUSTS ME.............	T	F	
51.	I AM A GOOD READER.................................	T	F	
52.	I DON'T WORRY MUCH.................................	T	F	
53.	IT IS HARD FOR ME TO MAKE FRIENDS..................	T	F	
54.	MY FAMILY WOULD HELP ME IN ANY KIND OF TROUBLE.....	T	F	
55.	I AM NOT DOING AS WELL IN SCHOOL AS I WOULD LIKE TO.	T	F	
56.	I HAVE A LOT OF SELF CONTROL.......................	T	F	
57.	FRIENDS USUALLY FOLLOW MY IDEAS....................	T	F	
58.	MY FAMILY UNDERSTANDS ME...........................	T	F	
59.	I FIND IT HARD TO TALK IN FRONT OF THE CLASS.......	T	F	
60.	I OFTEN FEEL ASHAMED OF MYSELF.....................	T	F	70

1/80

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T — — — 6

		TRUE	FALSE	
61.	I WISH I HAD MORE CLOSE FRIENDS....................	T	F	7
62.	MY FAMILY OFTEN EXPECTS TOO MUCH OF ME.............	T	F	
63.	I AM GOOD IN MY SCHOOL WORK........................	T	F	
64.	I AM A GOOD PERSON.................................	T	F	
65.	SOMETIMES I AM HARD TO BE FRIENDLY WITH............	T	F	
66.	I GET UPSET EASILY AT HOME.........................	T	F	
67.	I LIKE TO BE CALLED ON IN CLASS....................	T	F	
68.	I WISH I WERE A DIFFERENT PERSON...................	T	F	
69.	I AM FUN TO BE WITH................................	T	F	
70.	I AM AN IMPORTANT PERSON TO MY FAMILY..............	T	F	
71.	MY CLASSMATES THINK I AM A GOOD STUDENT............	T	F	
72.	I AM SURE OF MYSELF................................	T	F	
73.	OFTEN I DON'T LIKE TO BE WITH OTHER CHILDREN.......	T	F	
74.	MY FAMILY AND I HAVE A LOT OF FUN TOGETHER.........	T	F	
75.	I WOULD LIKE TO DROP OUT OF SCHOOL.................	T	F	
76.	I CAN ALWAYS TAKE CARE OF MYSELF...................	T	F	
77.	I WOULD RATHER BE WITH KIDS YOUNGER THAN I AM......	T	F	
78.	MY FAMILY USUALLY CONSIDERS MY FEELINGS............	T	F	
79.	I CAN DISAGREE WITH MY TEACHER.....................	T	F	
80.	I CAN'T BE DEPENDED ON.............................	T	F	26

2/80

APPENDIX E

ADMINISTRATOR INSTRUCTIONS FOR THE SOCIOGRAM

SOCIOGRAM

Instructions for Administration

Students and their Arrangement

The sociogram is to be given to the class of students with which the PH student spends most of his/her time; this could be a regular class or a special education class. The students should be seated at desks or tables so they can write. There should be enough space between them so that they are not too aware of each other's work.

Materials

Pass out a pencil and a response slip to each student. (Response slips are in the brown envelope.)

Directing the Students

After distributing the materials, say:

"Each of you has a response slip. The first thing I would like you to do is to write your first and last names in the space which has been given on the slip."

Allow the students enough time to finish and say:

"We are interested in finding out how students make friends at school. We would like you to help us by supposing that this class is going to visit the zoo tomorrow.

Now, imagine that the class would get there by taking a school bus and that your teacher tells you that you may sit beside anyone you choose.

On your slip of paper I want you to write the first and last names of the student in this class you would most like to sit beside on the school bus. I want you to be as honest as possible. I am going to put your slips of paper back in this envelope (show brown envelope) and will not show your answers to anyone, not even your teacher. Be careful not to let anyone see your answer now."

Allow the students enough time to finish and say:

"Now, suppose that your teacher lets someone else sit with that student and you have to choose again. I want you to write down the first and last names of the student you would choose secondly and, just in case the same thing happens again, the student you would name as a third choice."

Allow the students enough time to finish, collect the response slips, put them in the brown envelope, seal the envelope while they are still present and thank the students for their help.

NOTE - Be sure that each student has written down the first and last names of three students. (You may tell students that they do not have to worry too much about spelling.)

APPENDIX F

THE SOCIAL SCALE AND INSTRUCTIONS FOR ADMINISTRATION

NAME ______________________

___ ___ ___ ___ ___ ___
1 6

8 5 ___ ___
7 10

11 ______ No. boys listed

13 ______ No. boys chosen

15 ______ No. activities with boys

17 ______ No. girls listed

19 ______ No. girls chosen

21 ______ No. activities with girls

23 ______ No. boys and girls listed (add)

25 ______ No. boys and girls chosen (add)

27 ______ No. activities with boys and girls (count)

29 ______ No. activities alone

SOCIAL SCALE

LOOK AT THE EXAMPLE AT THE BOTTOM OF THIS PAGE.
CAN YOU SEE BILLIE IN THE CENTER OF THE PAGE?
BILLIE HAS WRITTEN DOWN THE NAMES OF SOME STUDENTS HE KNOWS.
BY LOOKING AT THE LINES BILLIE HAS DRAWN, WE CAN TELL WITH WHOM BILLIE WORKS AND PLAYS.

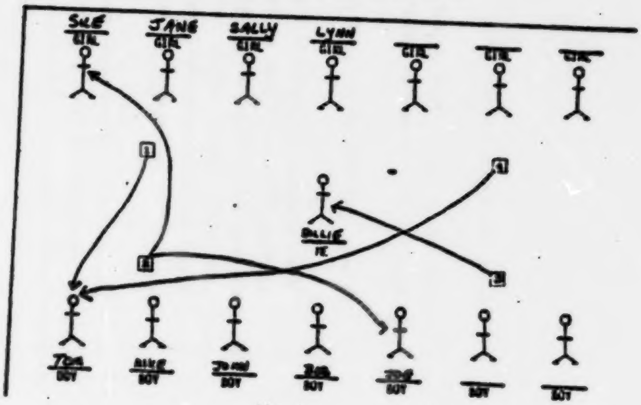
NUMBER 1 STANDS FOR EATING LUNCH. BILLIE EATS LUNCH WITH TOM.

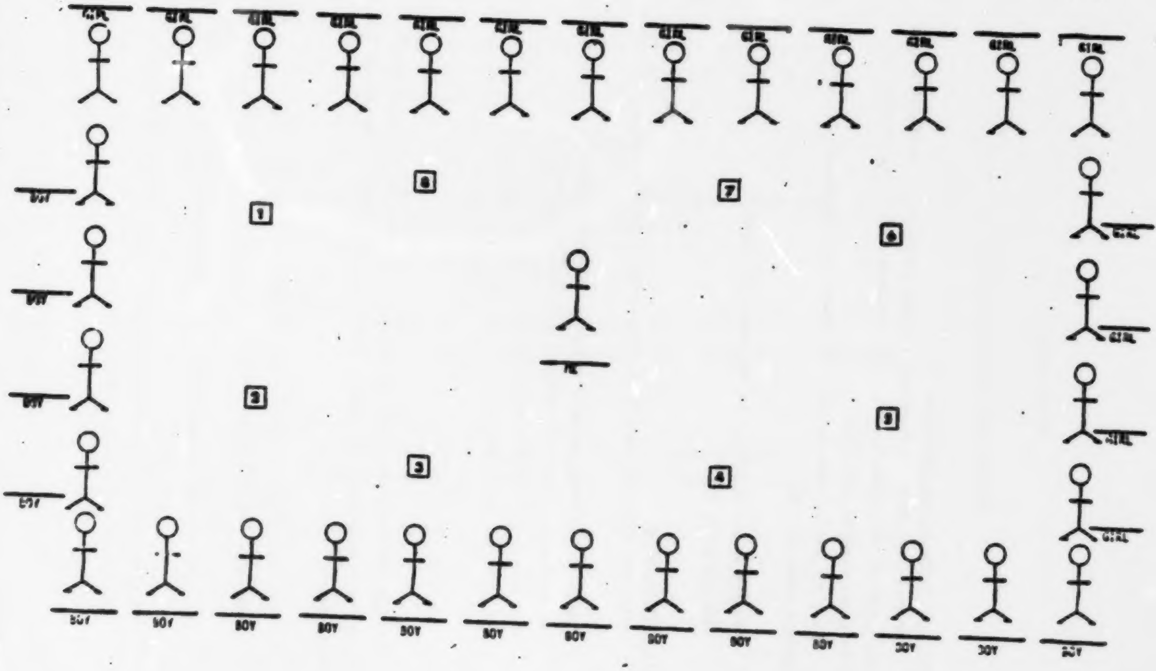
NUMBER 2 STANDS FOR RIDING TO SCHOOL. BILLIE RIDES TO SCHOOL WITH SUE AND JOE.

NUMBER 3 STANDS FOR BUILDING MODEL AIRPLANES.. BILLIE BUILDS MODEL AIRPLANES BY HIMSELF.

NUMBER 4 STANDS FOR PLAYING CHECKERS. BILLIE PLAYS CHECKERS WITH TOM.

ON THE OTHER SIDE OF THIS PAGE, THERE IS THE SAME KIND OF DRAWING. WE ARE GOING TO ASK YOU TO DO THE SAME THING BILLIE HAS DONE.
NOW, TURN OVER YOUR PAGE AND I WILL TELL YOU EXACTLY WHAT TO DO.


SUE
GIRL
JANE
GIRL
SALLY
GIRL
LYNN
GIRL
GIRL
GIRL
GIRL
1
4
BILLIE
ME
2
3
TOM
BOY
MIKE
BOY
JOHN
BOY
BOB
BOY
JOE
BOY
BOY
BOY


GIRL
GIRL
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GIRL
BOY
8
7
1
GIRL
6
BOY
GIRL
ME
BOY
2
5
GIRL
3
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BOY
GIRL
BOY
BOY
BOY
BOY
BOY
BOY
BOY
BOY
BOY
BOY
BOY
BOY
BOY

SOCIAL SCALE

Instructions for Administration

Arrangement of Students and Materials

Be sure that students have room to work separately. Students should not be too aware of each other's work. The students should also be able to see and hear you without difficulty.

Pass out pencils and charts. The chart is to be placed so that the small example faces up. Say:

> *"Please do not touch any of the materials until I tell you to do so."*

Directing the Students

After the materials have been distributed in the desired manner, say:

> *"We know that when you work and play, you often like to do things with other people. This chart will help you tell us the people with whom you work and play. In front of you is an example of what we want you to do. Let us read together. I will read aloud while you read silently."*

Read the explanation for the example in a slow and distinct manner. Allow time for referring to the chart. When all the students have turned over the chart, say:

> *"Now that you have turned over the page, you can see many girl and boy stickpeople."*

Be sure everyone is responding and co-operating. Say:

> *"Before we begin, I want to ask you to be as honest and as careful as possible with your answers."*

Begin the test by saying:

> *"Now, let us begin. Pick up your pencil and write your name under the stickperson called 'ME' in the center."*

Be sure that everyone is finished, then continue:

> *"I now want you to imagine that you are going to have a birthday party, and I want you to write in the names of the boys and girls in this school whom you would ask to your party. (Do not include brothers and sisters.) Please use initials or short names so that you can finish quickly. Do not worry if you have stickpeople left over."*

You may have to answer a few questions at this point. If so, keep the answers formal and exactly in line with the instructions. Try to keep all conversation to a minimum. Before continuing, be sure that all students feel satisfied that they have finished. At the appropriate time, you may say:

> *"I hope everyone has finished now. If you think of someone you have forgotten, you may add that name later."*

Begin the line drawing for the numbered activities by carefully reading the following instructions. Be sure to pause and give enough time between each activity for the students to draw the lines.

> *"I am now going to name eight different activities that you might do with your friends. Can you see the eight numbered boxes on your page? Good. Now, find number one."*

Be sure that each student is following and understands.

> *"When I tell you what number one stands for, draw lines from number one to the boys and girls with whom you do the activity. If you do the activity by yourself, or not at all, draw a line from number one to the stickperson representing you in the center of the page. Now, listen carefully. This is number one activity."*

Number 1

"With whom of the boys and girls do you share secrets? Draw lines from number one to those boys and girls."

(Pause)

Number 2

"With whom do you play at recess? Draw lines from number two to those boys and girls."

(Pause)

Number 3

"With whom do you talk about the books you have read and the T.V. shows you have seen? Draw lines from number three to those boys and girls."

(Pause)

Number 4

"With whom do you exchange telephone calls? Draw lines from number four to those boys and girls."

(Pause)

Number 5

"With whom do you work on class projects when you are allowed to choose? Draw lines from number five to those boys and girls."

(Pause)

Number 6

"With whom do you share help on schoolwork? Draw lines from number six to those boys and girls."

(Pause)

Number 7

"With whom do you share things on field trips and school outings? Draw lines from number seven to those boys and girls."

(Pause)

Number 8

"With whom did you exchange presents last Christmas? Draw lines from number eight to those boys and girls."

Be sure all have finished. Thank the students. Collect the materials.

APPENDIX G

THE
EMOTIONAL AND SOCIAL BEHAVIOR RATING SCALE

EMOTIONAL AND SOCIAL

BEHAVIOR RATING SCALE

Directions:

On the following pages, there is a series of 75 words or phrases often used to describe students. Please describe the student whose name is given below by circling the appropriate number for each item.

This material is strictly confidential and names will not be used in the final report, so please mark all the items as honestly as possible.

NAME OF STUDENT

____

FOR OFFICE USE ONLY

1 ___ ___ ___ ___ 6

7 8 ___ 10

	Never	Not Usually/ Not Frequently	Sometimes	Usually/Frequently	Always/Constantly	
1. Collected	1	2	3	4	5	(11)
2. Feelings are easily hurt	1	2	3	4	5	
3. Steady	1	2	3	4	5	
4. Fights with peers	1	2	3	4	5	
5. Moody	1	2	3	4	5	
6. Fears failure	1	2	3	4	5	
7. Good-natured	1	2	3	4	5	
8. Hyperactive	1	2	3	4	5	
9. Adjusts easily to new situations	1	2	3	4	5	
10. Calm	1	2	3	4	5	
11. Participates well in group activities	1	2	3	4	5	
12. Wants too much attention	1	2	3	4	5	
13. Has concern for others	1	2	3	4	5	
14. Teased by peers	1	2	3	4	5	
15. Interacts easily with teachers	1	2	3	4	5	
16. Polite	1	2	3	4	5	
17. Cheats	1	2	3	4	5	
18. Teases other students	1	2	3	4	5	
19. Bullies	1	2	3	4	5	
20. Obstinate	1	2	3	4	5	
21. Gets into trouble when no one is watching	1	2	3	4	5	
22. Has temper outbursts	1	2	3	4	5	
23. Self-assured	1	2	3	4	5	
24. Difficult to comfort	1	2	3	4	5	
25. Talks back to teachers	1	2	3	4	5	(35)

	Never	Not Usually/ Not Frequently	Sometimes	Usually/Frequently	Always/Constantly	
26. Ignored by peers	1	2	3	4	5	(36)
27. Spends long periods of time alone	1	2	3	4	5	
28. Responsible	1	2	3	4	5	
29. Daydreams	1	2	3	4	5	
30. Consistent	1	2	3	4	5	
31. Hostile to teachers	1	2	3	4	5	
32. Cries	1	2	3	4	5	
33. Composed	1	2	3	4	5	
34. Sociable	1	2	3	4	5	
35. Obedient	1	2	3	4	5	
36. Name-calls	1	2	3	4	5	
37. Kind	1	2	3	4	5	
38. Withdrawn	1	2	3	4	5	
39. Lies	1	2	3	4	5	
40. Completes activities	1	2	3	4	5	
41. Confident	1	2	3	4	5	
42. Resented by peers	1	2	3	4	5	
43. Easily embarrassed by peers	1	2	3	4	5	
44. Displays jealousy over attention paid to other children	1	2	3	4	5	
45. Friendly to teachers	1	2	3	4	5	
46. Rejected by peers	1	2	3	4	5	
47. Bossy	1	2	3	4	5	
48. Impulsive	1	2	3	4	5	
49. Asks for too much comfort and praise	1	2	3	4	5	
50. Steals	1	2	3	4	5	(60)

1/80

(1) — — — — — (6)

	Never	Not Usually/ Not Frequently	Sometimes	Usually/Frequently	Always/Constantly	
51. Peers ask questions about student	1	2	3	4	5	(7)
52. Bullied by peers	1	2	3	4	5	
53. Peers are curious about student	1	2	3	4	5	
54. Eager	1	2	3	4	5	
55. Knows how to have fun	1	2	3	4	5	
56. Clings	1	2	3	4	5	
57. Self-controlled	1	2	3	4	5	
58. Tense	1	2	3	4	5	
59. Bossed around by peers	1	2	3	4	5	
60. Interacts well with peers	1	2	3	4	5	
61. Has feelings of inferiority	1	2	3	4	5	
62. Cheerful	1	2	3	4	5	
63. Overly talkative	1	2	3	4	5	
64. Respects property	1	2	3	4	5	
65. Co-operates with peers	1	2	3	4	5	
66. Stared at by peers	1	2	3	4	5	
67. Can accept criticism	1	2	3	4	5	
68. Called names by peers	1	2	3	4	5	
69. Feared by peers	1	2	3	4	5	
70. Whines	1	2	3	4	5	
71. Imitated by peers (negatively)	1	2	3	4	5	
72. Possessive	1	2	3	4	5	
73. Generous	1	2	3	4	5	
74. Worries	1	2	3	4	5	
75. Trustful	1	2	3	4	5	(31)

Please check that you responded to all items

3/(80)

APPENDIX H

THE TEACHER QUESTIONNAIRE ABOUT STUDENTS

TEACHER QUESTIONNAIRE

ABOUT STUDENTS

Directions:

On the following page, there is a series of 26 statements which teachers often use to describe their feelings about their students. Please describe your feelings about the student whose name is given below by circling the appropriate number for each statement.

This material is strictly confidential and names will not be used in the final report, so please repond to all the statements as honestly as possible.

NAME OF STUDENT

____

FOR OFFICE USE ONLY

1 ____ ____ ____ ____ 6

9 ____ 2 ____ ____ 10

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. I like having this student in the classroom...............	1	2	3	4	5
2. I help this student too much...............................	1	2	3	4	5
3. I want to get to know this student better................	1	2	3	4	5
4. I understand this student.................................	1	2	3	4	5
5. This student makes me feel tense..........................	1	2	3	4	5
6. I feel sorry for this student............................	1	2	3	4	5
7. I protect this student....................................	1	2	3	4	5
8. I feel confortable with this student......................	1	2	3	4	5
9. I stare at this student...................................	1	2	3	4	5
10. I think highly of this student............................	1	2	3	4	5
11. This student embarrasses me.............................	1	2	3	4	5
12. This student upsets me..................................	1	2	3	4	5
13. I am afraid to play or work with this student............	1	2	3	4	5
14. I respect this student..................................	1	2	3	4	5
15. I worry about this student...............................	1	2	3	4	5
16. I miss this student when he/she is away..................	1	2	3	4	5
17. I don't know what to do about this student...............	1	2	3	4	5
18. I am careful about what I say to this student............	1	2	3	4	5
19. When I see this student I feel good......................	1	2	3	4	5
20. I am delighted to know this student......................	1	2	3	4	5
21. This student pleases me.................................	1	2	3	4	5
22. I get along with this student............................	1	2	3	4	5
23. This student takes up too much of my time................	1	2	3	4	5
24. I enjoy working with this student........................	1	2	3	4	5
25. I stay away from this student............................	1	2	3	4	5
26. I feel curious about this student........................	1	2	3	4	5

Please check that you responded to all items

APPENDIX I

THE STUDENT INTERVIEW SCHEDULE

THE PHYSICALLY HANDICAPPED
AND HEALTH IMPAIRED CHILDREN:

DO THEY PROSPER IN REGULAR
TORONTO ELEMENTARY SCHOOLS?

STUDENT INTERVIEW SCHEDULE

NAME: ______________________________

_ _ _ _ _ _ 6

1 4 _ _ 10
8

1(a) ARE THE FOLLOWING AREAS OF THIS SCHOOL EASILY ACCESSIBLE TO YOU? Elaborate on your answers for alternatives (1) and (2). If student's physical handicap and/or health impairment presents NO MORE difficulties than regular students, write "O.K."

	(1) Easily Accessible	(2) Not Easily Accessible	(3) Not Applicable To This School	Elaboration	
Main School Entrance............	( )	( )	( )		
Other School Entrances...........	( )	( )	( )	______________________	(___) 13
Ground Level Floor...............	( )	( )	( )	______________________	(___)
Lower Floors......................	( )	( )	( )	______________________	(___)
Upper Floors......................	( )	( )	( )	______________________	(___)
Regular Classroom(s).............	( )	( )	( )	______________________	(___) 25
Special Classroom(s).............	( )	( )	( )	______________________	(___)
Library...........................	( )	( )	( )	______________________	(___)
Science Room (Common)............	( )	( )	( )	______________________	(___)
Gymnasium.........................	( )	( )	( )	______________________	(___)
Auditorium........................	( )	( )	( )	______________________	(___) 40
Washroom(s).......................	( )	( )	( )	______________________	(___)
Cafeteria/Lunchroom..............	( )	( )	( )	______________________	(___)
Office............................	( )	( )	( )	______________________	(___)
Nurse's Room......................	( )	( )	( )	______________________	(___)
Play Area (indoors)..............	( )	( )	( )	______________________	(___) 55
Play Area (outdoors).............	( )	( )	( )	______________________	(___)
Stage.............................	( )	( )	( )	______________________	(___)
Music Room........................	( )	( )	( )	______________________	(___)
Chapel............................	( )	( )	( )	______________________	(___)
				______________________	(___) 70

0 1
79 80

1 (b) ARE THERE IMPORTANT AREAS OF THIS SCHOOL WHICH ARE NOT IN THE ABOVE LIST WHICH ARE:

Easily Accessible	Elaboration	
		(__ __ __ __) 10
		(__ __ __ __)
		(__ __ __ __)
		(__ __ __ __)

Not Easily Accessible	Elaboration	
		(__ __ __ __) 26
		(__ __ __ __)
		(__ __ __ __)
		(__ __ __ __) 38

2 (a) ARE THE FOLLOWING FACILITIES OF THIS SCHOOL CONVENIENT FOR THEM?

Elaborate on your answers for alternatives (1) and (2). (If student's physical handicap and/or health impairment presents no more difficulties than regular student's, write "O.K.)

	(1) Convenient	(2) Not Convenient	(3) Not Applicable To This School	Elaboration	
Drinking Fountains.......	( )	( )	( )		(__ __ __) 41
Classroom Sinks..........	( )	( )	( )		(__ __ __)
Classroom Desks/Tables...	( )	( )	( )		(__ __ __)
Toilets..................	( )	( )	( )		(__ __ __) 50
Lockers..................	( )	( )	( )		(__ __ __)
Washroom Sinks...........	( )	( )	( )		(__ __ __)
Elevators................	( )	( )	( )		(__ __ __)
Swimming Pool............	( )	( )	( )		(__ __ __)
Library Shelves..........	( )	( )	( )		(__ __ __) 65
Cafeteria Facilities.....	( )	( )	( )		(__ __ __)
Gymnasium Facilities.....	( )	( )	( )		(__ __ __)
Playground Facilities....	( )	( )	( )		(__ __ __)
School Bus...............	( )	( )	( )		(__ __ __) 77

0 2
79 80

2 (b) ARE THERE IMPORTANT FACILITIES OF THIS SCHOOL WHICH ARE NOT IN THE ABOVE LIST WHICH ARE:

Convenient

Elaboration

(__ __ __ __)10
(__ __ __ __)
(__ __ __ __)
(__ __ __ __)

Not Convenient

Elaboration

(__ __ __ __)20
(__ __ __ __)
(__ __ __ __)
(__ __ __ __)30

3 (a) HAVE YOU EXPERIENCED ANY ACCIDENTS ASSOCIATED WITH THE PHYSICAL FACILITIES OF THIS SCHOOL?

Yes	No	Don't Know
1	2	3

(b) IF "YES", WHAT FACILITY(IES) CAUSED THIS (THESE) ACCIDENT(S)?

(__) 39
(__ __)
(__ __)
(__ __)
(__ __)
(__ __)40

4 (a) HOW DO YOU FEEL ABOUT BEING IN THIS SCHOOL?

(1) Very Happy
(2) Happy
(3) In Between
(4) Sad
(5) Very Sad
(6) Don't Know

(b) ELABORATE ON YOUR ANSWER.

(__) 50
(__ __)
(__ __)
(__ __)
(__ __)
(__ __)60

5 (a) HOW ARE YOU DOING IN YOUR MATHEMATICS THIS YEAR?

(1) Very Good
(2) Good
(3) In Between
(4) Poor
(5) Very Poor
(6) Don't Know

(__) 61

(b) ELABORATE ON YOUR ANSWER.

____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __) 71

(c) DO YOU THINK YOU COULD DO BETTER IN MATHEMATICS?

Yes	No	Don't Know
1	2	3

(__) 72

(d) IF "NO", WHY NOT?

____ (__ __)
____ (__ __)
____ (__ __) 0 2
79 80
____ (__ __) 6
____ (__ __)

(e) IF "YES", WHAT COULD YOU OR SOMEONE ELSE DO TO IMPROVE YOUR MATHEMATICS?

____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __) 20

---

6 (a) HOW ARE YOU DOING IN YOUR READING THIS YEAR?

(1) Very Good
(2) Good
(3) In Between
(4) Poor
(5) Very Poor
(6) Don't Know

(__) 21

(b) ELABORATE ON YOUR ANSWER.

____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __) 31

(c) DO YOU THINK YOU COULD DO BETTER IN READING?

Yes	No	Don't Know
1	2	3

(__) 32

(d) IF "NO", WHY NOT?

____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __) 42

(e) IF "YES", WHAT COULD YOU OR SOMEONE ELSE DO TO IMPROVE YOUR READING?

____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __) 52

7 (a) HOW ARE YOU GETTING ALONG WITH YOUR CLASSMATES THIS YEAR?

(1) Very Good
(2) Good
(3) In Between
(4) Poor
(5) Very Poor
(6) Don't Know
(__) 53

(b) ELABORATE ON YOUR ANSWER.

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __) 63

(c) DO YOU THINK YOU COULD GET ALONG BETTER WITH YOUR CLASSMATES?

Yes	No	Don't Know
1	2	3

(__) 64

(d) IF "NO", WHY NOT?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __) 74

(e) IF "YES", WHAT COULD YOU OR SOMEONE ELSE DO TO IMPROVE THE SITUATION?

________________________________ (__ __)
0 4
2 1
________________________________ (__ __) 79 80
________________________________ (__ __) 8
________________________________ (__ __)
________________________________ (__ __) 12

8 (a) HOW IS YOUR BEHAVIOUR IN CLASS THIS YEAR?

(1) Very Good
(2) Good
(3) In Between
(4) Poor
(5) Very Poor
(6) Don't Know
(__) 13

(b) ELABORATE ON YOUR ANSWER.

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __) 23

(c) DO YOU THINK YOUR BEHAVIOUR COULD BE BETTER?

Yes	No	Don't Know
1	2	3

(__) 24

(d) IF "NO", WHY NOT?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __) 34

(e) IF "YES", WHAT COULD YOU OR SOMEONE ELSE DO TO IMPROVE THE SITUATION?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __) 44

9 (a) DO YOUR FRIENDS HAVE TO HELP YOU IN SPECIAL WAYS IN THIS SCHOOL?

Yes	No	Don't Know	
1	2	3	(__) 45

(b) IF "YES", ELABORATE ON THESE WAYS.

(__ __)
(__ __)
(__ __)
(__ __)
(__ __) 55

10 (a) ARE THERE ACTIVITIES, SUCH AS MUSIC, ART, FIELD TRIPS, ETC. WHICH YOU WOULD LIKE TO DO IN THIS SCHOOL BUT CAN'T?

Yes	No	Don't Know	
1	2	3	(__) 56

(b) IF "YES", NAME THEM.

(__ __)
(__ __)
(__ __) 62
(__ __)
(__ __)
(__ __)
(__ __)
(__ __) 72

11 (a) HAVE YOU MISSED MORE THAN TWO WEEKS OF SCHOOL THIS YEAR?

Yes	No	Don't Know	
1	2	3	(__) 73

(b) IF "YES", WHY?

(__ __)
(__ __) 0 5
79 80

(c) IF "YES", HOW LONG?

(in weeks) (__ __) 8

(d) IF "YES", WHAT DID YOU DO TO TRY TO CATCH UP IN YOUR SCHOOL WORK?

(__ __)
(__ __)
(__ __) 14

12. OTHER COMMENTS:

(__ __) 16
(__ __)
(__ __)
(__ __)
(__ __)

13. INTERVIEWER'S COMMENTS:

(__ __) 26
(__ __)
(__ __)
(__ __)
(__ __) 34

0 6
79 80

APPENDIX J

THE TEACHER INTERVIEW SCHEDULE

THE PHYSICALLY HANDICAPPED
AND HEALTH IMPAIRED CHILDREN:

DO THEY PROSPER IN REGULAR
TORONTO ELEMENTARY SCHOOLS?

TEACHER INTERVIEW SCHEDULE

TEACHER'S NAME: ______________________________

STUDENT'S NAME: ______________________________

___ ___ ___ ___ ___ ___ 6

1 2 ___ ___ 10

The purpose of this study is to determine whether the academic, social, emotional, physical and medical needs of physically handicapped and health impaired children are being met in regular Toronto Schools.

This interview schedule is composed of two parts: Part A contains questions about a specific student whose name is given above, while Part B contains questions about you, the teacher.

A

1(a) ARE THE FOLLOWING AREAS OF THIS SCHOOL EASILY ACCESSIBLE TO THIS STUDENT? Elaborate on your answers for alternatives (1) and (2). If student's physical handicap and/or health impairment presents no more difficulties than regular students, write "O.K."

	(1) Easily Accessible	(2) Not Easily Accessible	(3) Not Applicable To This School	Elaboration	
Main School Entrance..............	( )	( )	( )		
Other School Entrances...........	( )	( )	( )	____________________	(___ ___ ___) 13
Ground Level Floor...............	( )	( )	( )	____________________	(___ ___ ___)
Lower Floors.....................	( )	( )	( )	____________________	(___ ___ ___)
Upper Floors.....................	( )	( )	( )	____________________	(___ ___ ___)
Regular Classroom(s).............	( )	( )	( )	____________________	(___ ___ ___) 25
Special Classroom(s).............	( )	( )	( )	____________________	(___ ___ ___)
Library..........................	( )	( )	( )	____________________	(___ ___ ___)
Science Room (Center)............	( )	( )	( )	____________________	(___ ___ ___)
Gymnasium........................	( )	( )	( )	____________________	(___ ___ ___)
Auditorium.......................	( )	( )	( )	____________________	(___ ___ ___) 40
Washroom(s)......................	( )	( )	( )	____________________	(___ ___ ___)
Cafeteria/Lunchroom..............	( )	( )	( )	____________________	(___ ___ ___)
Office...........................	( )	( )	( )	____________________	(___ ___ ___)
Nurse's Room.....................	( )	( )	( )	____________________	(___ ___ ___)
Play Area (in-doors).............	( )	( )	( )	____________________	(___ ___ ___) 55
Play Area (outdoors).............	( )	( )	( )	____________________	(___ ___ ___)
Stage............................	( )	( )	( )	____________________	(___ ___ ___)
Music Room.......................	( )	( )	( )	____________________	(___ ___ ___)
Chapel...........................	( )	( )	( )	____________________	(___ ___ ___)
				____________________	(___ ___ ___) 70

0 1
79 80

1 (b) ARE THERE IMPORTANT AREAS OF THIS SCHOOL WHICH ARE NOT IN THE ABOVE LIST WHICH ARE:

Easily Accessible	Elaboration	
____________________	____________________	(___ ___ ___ ___) 10
____________________	____________________	(___ ___ ___ ___)
____________________	____________________	(___ ___ ___ ___)
____________________	____________________	(___ ___ ___ ___) 22

Not Easily Accessible	Elaboration	
____________________	____________________	(___ ___ ___ ___) 26
____________________	____________________	(___ ___ ___ ___)
____________________	____________________	(___ ___ ___ ___)
____________________	____________________	(___ ___ ___ ___) 38

2(a) ARE THE FOLLOWING **FACILITIES** OF THIS SCHOOL CONVENIENT FOR THIS STUDENT TO USE?

Elaborate on your answers for alternatives (1) and (2). If student's physical handicap and/or health impairment presents **no more** difficulties than regular students, write "O.K."

	(1) Convenient	(2) Not Convenient	(3) Not Applicable To This School	Elaboration	
Drinking Fountains...........	( )	( )	( )	________________	(___ ___ ___) 41
Classroom Sinks..............	( )	( )	( )	________________	(___ ___ ___)
Classroom Desks/Tables.......	( )	( )	( )	________________	(___ ___ ___)
Toilets......................	( )	( )	( )	________________	(___ ___ ___) 50
Lockers......................	( )	( )	( )	________________	(___ ___ ___)
Washroom Sinks...............	( )	( )	( )	________________	(___ ___ ___)
Elevators....................	( )	( )	( )	________________	(___ ___ ___)
Swimming Pool................	( )	( )	( )	________________	(___ ___ ___)
Library Shelves..............	( )	( )	( )	________________	(___ ___ ___) 65
Cafeteria Facilities.........	( )	( )	( )	________________	(___ ___ ___)
Gymnasium Facilities.........	( )	( )	( )	________________	(___ ___ ___)
Playground Facilities........	( )	( )	( )	________________	(___ ___ ___)
School Bus...................	( )	( )	( )	________________	(___ ___ ___)
				________________	(___ ___ ___) 77

0 2
79 80

2 (b) ARE THERE IMPORTANT FACILITIES OF THIS SCHOOL WHICH ARE NOT IN THE ABOVE LIST WHICH ARE:

Convenient	Elaboration	
________________	________________	(___ ___ ___ ___) 10
________________	________________	(___ ___ ___ ___)
________________	________________	(___ ___ ___ ___)
________________	________________	(___ ___ ___ ___) 22

Not Convenient	Elaboration	
________________	________________	(___ ___ ___ ___) 26
________________	________________	(___ ___ ___ ___)
________________	________________	(___ ___ ___ ___)
________________	________________	(___ ___ ___ ___) 38

3 (a) HAS THIS STUDENT EXPERIENCED ANY ACCIDENTS ASSOCIATED WITH THE PHYSICAL FACILITIES OF THIS SCHOOL?

Yes	No	Don't Know	
1	2	3	(__) 39

(b) IF YES, WHAT FACILITY(IES) CAUSED THIS(THESE) ACCIDENT(S)?

______________________________ (__ __) 41
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 49

4 (a) HOW WOULD YOU RATE YOUR KNOWLEDGE AND UNDERSTANDING OF THIS STUDENT'S PHYSICAL HANDICAP AND/OR HEALTH IMPAIRMENT UNDER THE FOLLOWING HEADINGS?

	Very Poor	Poor	Adequate	Good	Excellent	
Medical History..................................	1	2	3	4	5	(__) 50
Family History..................................	1	2	3	4	5	(__)
School History..................................	1	2	3	4	5	(__)
Nature of physical handicap and/or health impairment..........................	1	2	3	4	5	(__)
Ability to ambulate..............................	1	2	3	4	5	(__)
Ability to participate in physical activities	1	2	3	4	5	(__) 55
Ability to communicate..........................	1	2	3	4	5	(__)
Medical needs (medication)......................	1	2	3	4	5	(__)
Therapy needs..................................	1	2	3	4	5	(__)
Toileting needs................................	1	2	3	4	5	(__)
Physical education needs........................	1	2	3	4	5	(__) 60

(b) HOW DID YOU COME BY ANY KNOWLEDGE AND UNDERSTANDING THAT YOU HAVE IN THE AREAS GIVEN IN 4(a)?

______________________________ (__ __) 62
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 68
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 74

(c) DO YOU FEEL YOU SHOULD HAVE MORE KNOWLEDGE AND UNDERSTANDING?

Yes	No	Don't Know	
1	2	3	(__) 75

0 3
79 80

(d) IF YES, HOW WOULD YOU LIKE TO OBTAIN IT?

______________________________ (__ __) 8
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 16

5 (a) DESCRIBE HOW THIS STUDENT PARTICIPATES IN THE PHYSICAL EDUCATION PROGRAM AND/OR ACTIVITIES. (YOU MAY CHOOSE MORE THAN ONE ALTERNATIVE).

Participates fully in the regular physical education program 01
Participates on a limited basis in the regular physical education program.. 02
Engages in a special program designed for the student................ 03
Engages in exercises under the direction of a nurse, therapist or other trained person.................................. 04
Engages in physical activity on his/her own during school............ 05
Engages in no physical activity... 06
Other ______________________________
____

(__ __) 18
(__ __)
(__ __) 22

(b) COULD THE PARTICIPATION OF THIS STUDENT IN PHYSICAL EDUCATION AND/OR OTHER ACTIVITIES BE IMPROVED?

Yes	No	Don't Know	
1	2	3	(__) 23

(c) ELABORATE ON YOUR ANSWER.

______________________________ (__ __) 25
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 33

6. WHICH OF THE FOLLOWING SPECIAL SERVICES DOES THIS STUDENT REQUIRE? FOR EACH SUCH SERVICE, INDICATE WHO/WHAT YOU THINK SHOULD SUPPLY THE SERVICE IN AN IDEAL SITUATION (SEE CARD #1) AND WHO/WHAT ACTUALLY SUPPLIES THE SERVICE NOW.

Service	Needs Service (Yes = 1) (No = 2) (D.K. = 3)		Ideal Supplier(s) of Service	Who What Supplies Service Now	
Dressing....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)46	
Eating....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Toileting....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)72	0 4 / 79 80
Medical care....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Medication....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Mobility....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)45	
Repositioning....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Physical Therapy....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)71	0 5 / 79 80
Speech Therapy....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Occupational Therapy....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Psychological counselling....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)45	
Remedial academic help....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Typing services for note taking....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)71	0 6 / 79 80
Help with listening....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Help with reading....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Help with writing....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)45	
Help with talking....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Repairs for orthopedic equipment....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)71	0 7 / 79 80
Help for seizures/convulsions/comas....................................	(__)	....	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	

6 (b) ARE THERE OTHER SPECIAL SERVICES WHICH THIS STUDENT NEEDS BUT ARE NOT IN THE ABOVE LIST?

		Ideal Supplier(s) of Services	Who/What Supplies Services Now	
______________________________	(__ __)	(__ __, __ __, __ __)	(__ __, __ __, __ __)33	
______________________________	(__ __)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
______________________________	(__ __)	(__ __, __ __, __ __)	(__ __, __ __, __ __)61	
______________________________	(__ __)	(__ __, __ __, __ __)	(__ __, __ __, __ __)75	0 8 / 79 80
______________________________	(__ __)	(__ __, __ __, __ __)	(__ __, __ __, __ __)30	

7. HOW DO YOU PERSONALLY FEEL ABOUT HAVING THIS STUDENT IN YOUR CLASSROOM?

______________________________ (__ __)21
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)30

8 (a) GIVEN THIS STUDENT'S PHYSICAL HANDICAP AND/OR HEALTH IMPAIRMENT, DO YOU CONSIDER THE PRESENT EDUCATIONAL ARRANGEMENT TO BE THE MOST SUITABLE ONE?

Yes	No	Don't Know
1	2	3

(__) 31

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)41

(c) IF NO, WHAT KIND OF ARRANGEMENT WOULD YOU RECOMMEND?

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)51

(d) IF NO, HAS THE STUDENT'S PRESENT PLACEMENT BEEN REVIEWED DURING THIS SCHOOL YEAR?

Yes	No	Don't Know
1	2	3

(__)

(e) ELABORATE ON YOUR ANSWER FOR (d).

______________________________ (__ __)
______________________________ (__ __)56

9 (a) HOW WOULD YOU RATE THIS STUDENT'S OVERALL INTELLECTUAL POTENTIAL?

A	B	C	D	E	DON'T KNOW
1	2	3	4	5	6

(__) 57

(b) GIVEN THIS STUDENT'S INTELLECTUAL POTENTIAL, HOW WOULD YOU RATE HIS/HER PERFORMANCE IN MATHEMATICS THIS YEAR?

Above Potential.......... 1
Below Potential.......... 2
At Potential............. 3
Don't Know............... 4

(__)

(c) IF ABOVE POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

______________________________ (__ __)60
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)

(d) IF BELOW POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

______________________________ (__ __)70
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 79 80

(e) IF BELOW POTENTIAL, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

______________________________ (__ __)8
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)16

9 (f) GIVEN THIS STUDENT'S INTELLECTUAL POTENTIAL, HOW WOULD YOU RATE HIS/HER PERFORMANCE IN READING THIS YEAR?

Above Potential........... 1
Below Potential........... 2
At Potential.............. 3
Don't Know................ 4

(__) 17

(g) IF ABOVE POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)27

(h) IF BELOW POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)37

(i) IF BELOW POTENTIAL, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)47

10 (a) HOW WOULD YOU RATE THIS STUDENT'S SOCIAL ADJUSTMENT?

A	B	C	D	E	Don't Know
1	2	3	4	5	6

(__)48

(b) IF YOU RATED THE STUDENT'S SOCIAL ADJUSTMENT AS A OR B HOW DO YOU ACCOUNT FOR IT?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)58

(c) IF YOU RATED THE STUDENT'S SOCIAL ADJUSTMENT AS D OR E HOW DO YOU ACCOUNT FOR IT?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)68

(d) IF D OR E, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __)
________________________________ (__ __) 19 / 79-80

11 (a) HOW WOULD YOU RATE THIS STUDENT'S EMOTIONAL ADJUSTMENT?

A	B	C	D	E	Don't Know
1	2	3	4	5	6

(__) 7

(b) IF YOU RATED THE STUDENT'S EMOTIONAL ADJUSTMENT AS A OR B HOW DO YOU ACCOUNT FOR IT?

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)17

(c) IF YOU RATED THE STUDENT'S EMOTIONAL ADJUSTMENT AS D OR E HOW DO YOU ACCOUNT FOR IT?

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)27

(d) IF D OR E, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)37

12 (a) DOES THE PRESENCE OF THIS STUDENT IN YOUR CLASSROOM CREATE PROBLEMS FOR THE OTHER STUDENTS?

Yes	No	Don't Know
1	2	3

(__) 38

(b) IF NO, ELABORATE.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)46

(c) IF YES, DESCRIBE THE PROBLEMS.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)54

13 (a) DOES THE PRESENCE OF THIS STUDENT IN YOUR CLASSROOM CREATE PROBLEMS FOR YOU AS A TEACHER?

Yes	No	Don't Know
1	2	3

(__) 55

(b) IF NO, ELABORATE.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)63

(c) IF YES, DESCRIBE THE PROBLEMS.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)71

14 (a) DOES THE PRESENCE OF THIS STUDENT HELP THE OTHER STUDENTS BECOME MORE UNDERSTANDING AND TOLERANT OF INDIVIDUAL DIFFERENCES?

Yes	No	Don't Know
1	2	3

(__) 72

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)79 1 1 80

______________________________ (__ __)8

15 (a) HAS ANYTHING BEEN DONE TO HELP THE OTHER STUDENTS AFFECTIVELY (EMOTIONALLY) UNDERSTAND THIS STUDENT?

Yes 1   No 2   Don't Know 3

(b) ELABORATE ON YOUR ANSWER. (__) 9

(__ __)
(__ __)
(__ __)
(__ __) 17

16 (a) HAS ANYTHING BEEN DONE TO HELP THE OTHER STUDENTS COGNITIVELY UNDERSTAND THIS STUDENT?

Yes 1   No 2   Don't Know 3

(b) ELABORATE ON YOUR ANSWER. (__) 18

(__ __)
(__ __)
(__ __)
(__ __) 26

17 HOW WOULD YOU RATE THE ATTITUDES OF THE OTHER STUDENTS TO THIS STUDENT?

A 1   B 2   C 3   D 4   E 5   Don't Know 6

18 (a) WHAT IS THE APPROXIMATE SIZE OF YOUR CLASS? (__)

(1) 1 - 5
(2) 6 - 10
(3) 11 - 15
(4) 16 - 20
(5) 21 - 25
(6) 26 - 30
(7) 31 - 35
(8) 36 - 40

(b) IS THE SIZE OF YOUR CLASS TOO LARGE TO ACCOMMODATE THIS STUDENT? (__)

Yes 1   No 2   Don't Know 3

(c) ELABORATE ON YOUR ANSWER TO 18 (b). (__) 29

(__ __)
(__ __)
(__ __) 35

19 (a) DOES YOUR CLASS CONTAIN TOO MANY STUDENTS WITH SPECIAL NEEDS TO ACCOMMODATE THIS STUDENT?

Yes 1   No 2   Don't Know 3

(b) ELABORATE ON YOUR ANSWER. (__) 36

(__ __)
(__ __)
(__ __)
(__ __)
(__ __) 46

20 (a) DO YOU HAVE ENOUGH TIME TO PREPARE A PROPER PROGRAM FOR THIS STUDENT?

Yes 1   No 2   Don't Know 3

(b) ELABORATE ON YOUR ANSWER. (__) 47

(__ __)
(__ __)
(__ __)
(__ __)
(__ __) 57

21 (a) IS THE AMOUNT OF TIME YOU SPEND ON OTHER STUDENTS REDUCED AS A RESULT OF HAVING THIS STUDENT IN YOUR CLASS?

Yes 1   No 2   Don't Know 3

(b) ELABORATE ON YOUR ANSWER. (__) 58

(__ __)
(__ __)
(__ __)
(__ __)
(__ __) 68

22 (a) IS THE PRESENCE OF THIS STUDENT IN YOUR CLASSROOM A DETRIMENT TO THE EXISTING PROGRAM/CURRICULUM ACTIVITIES?

Yes 1   No 2   Don't Know 3

(b) ELABORATE ON YOUR ANSWER. (__)

(__ __)
(__ __)
(__ __)
(__ __) 79 80 1 2
(__ __) 8

24 (a) ARE CONSULTANTS READILY AVAILABLE WHO HAVE TRAINING IN SEVERAL EXCEPTIONALITIES TO HELP YOU MEET THE NEEDS OF THIS STUDENT?

Yes	No	Don't Know	
1	2	3	(__) 9

(b) IF NO, WHY NOT?

______________________________ (__ __)

______________________________ (__ __)

(c) IF NO, DO YOU NEED THE HELP OF CONSULTANTS TO MEET THE NEEDS OF THIS STUDENT?

Yes	No	Don't Know	
1	2	3	(__) 14

(d) IF YES TO (a), HAVE YOU USED THESE CONSULTANTS?

Yes	No	Don't Know	
1	2	3	(__)

(e) IF NO TO (d), WHY NOT?

______________________________ (__ __)

______________________________ (__ __)

25 (a) IS THERE A CO-ORDINATED EFFORT BETWEEN YOU AND MEMBERS OF THE ADMINISTRATION OF THIS SCHOOL TO MEET THE NEEDS OF THIS STUDENT?

Yes	No	Don't Know	
1	2	3	(__) 20

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)30

26 (a) IS THERE A CO-ORDINATED EFFORT BETWEEN THE REGULAR TEACHERS AND THE SPECIAL EDUCATION TEACHERS IN THIS SCHOOL TO MEET THE NEEDS OF THIS STUDENT?

Yes	No	Don't Know	Not Applicable	
1	2	3	4	(__)

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)41

27 (a) ARE LONG-TERM PLANS BEING MADE FOR THIS STUDENT'S SECONDARY EDUCATION?

Yes	No	Don't Know	
1	2	3	(__) 42

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)52

B

1 (a) HAVE YOU HAD ANY [illegible] TRAINING IN THE EDUCATION OF PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED CHILDREN?

Yes	No	Don't Know
1	2	3

(__) 13

IF YES, GO TO QUESTION 1 (d).

IF NO, ANSWER QUESTIONS 1 (b) AND 1 (c).

(b) WOULD YOU LIKE TO HAVE SUCH TRAINING?

Yes	No	Don't Know
1	2	3

(__)

(c) IF YES TO (b), HOW WOULD YOU LIKE TO OBTAIN SUCH TRAINING?

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __) 42

1 3
79 80

GO TO QUESTION 2.

---

1 (d) DESCRIBE THE TYPE OF TRAINING (e.g. SUMMER COURSE), GIVE THE PLACE OF TRAINING (e.g. O.I.S.E.), GIVE THE LENGTH OF TRAINING IN WEEKS, RATE THE QUALITY OF THE TRAINING (A, B, C, D, E) AND DESCRIBE THE CONTENT OF THE TRAINING BY SELECTING ALTERNATIVES FROM CARD #2.

TYPE	PLACE	NUMBER OF WEEKS	QUALITY	CONTENT
______	______	______	______	______
______	______	______	______	______
______	______	______	______	______
______	______	______	______	______
______	______	______	______	______
______	______	______	______	______
______	______	______	______	______

1 (d) (FOR OFFICE USE ONLY)

TYPE	PLACE	NUMBER OF WEEKS	QUALITY		CONTENT	
__ __	__ __	__ __ __	__	14	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	
__ __	__ __	__ __ __	__	38	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	
__ __	__ __	__ __ __	__	62	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	1 4
__ __	__ __	__ __ __	__	14	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	79 80
__ __	__ __	__ __ __	__	38	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	
__ __	__ __	__ __ __	__	62	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	1 5
__ __	__ __	__ __ __	__	14	__ __, __ __, __ __, __ __, __ __, __ __, __ __, __ __	79 80
						30

2 (a) HAVE YOU HAD ANY PREVIOUS EXPERIENCES IN EDUCATING PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED STUDENTS?

Yes	No	Don't Know	
1	2	3	(__) 31

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 41

3 (a) HAVE YOU HAD ANY PERSONAL EXPERIENCE OUTSIDE OF SCHOOL OR THE FIELD OF EDUCATION WITH PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED CHILDREN AND/OR ADULTS?

Yes	No	Don't Know	
1	2	3	(__) 42

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 52

4 REGARDLESS OF THE TYPE AND AMOUNT OF TRAINING YOU HAVE HAD ABOUT PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED CHILDREN, HOW WELL INFORMED AND COMPETENT DO YOU FEEL IN THIS AREA? RATE (A, B, C, D OR E) ITEMS 1 TO 16 ON CARD #2.

01	___	(__)	53
02	___	(__)	
03	___	(__)	
04	___	(__)	
05	___	(__)	
06	___	(__)	
07	___	(__)	
08	___	(__)	60
09	___	(__)	
10	___	(__)	
11	___	(__)	
12	___	(__)	
13	___	(__)	
14	___	(__)	
15	___	(__)	
16	___	(__)	68

5. OTHER COMMENTS:

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 1 8
79 80

6. INTERVIEWER'S COMMENTS:

______________________________ (__ __) 8
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 16

1 7
79 80

Teacher Card #1

01	PRINCIPAL
02	VICE PRINCIPAL
03	GUIDANCE COUNSELLOR
04	REGULAR TEACHER
05	SPECIAL EDUCATION TEACHER
06	TEACHER WITH SPECIAL TRAINING
07	CRISIS TEACHER (SPECIAL TRAINING)
08	NURSE
09	DOCTOR
10	THERAPIST
11	PSYCHOLOGIST
12	CONSULTANT
13	ITINERANT/RESOURCE TEACHER
14	SOCIAL WORKER
15	CLERGY
16	EDUCATIONAL ASSISTANT
17	VOLUNTEER WORKER
18	PARENT
19	SIBLING
20	STUDENT'S PEERS
21	SCHOOL SECRETARY
22	SCHOOL CARETAKER
23	MECHANICAL DEVICE
24	ELECTRONIC DEVICE
25	SELF
26	NO-ONE

TEACHERS' CARD #2

01	CHARACTERISTICS AND CAUSES OF PHYSICAL HANDICAPS AND/OR HEALTH CONDITIONS.
02	TREATMENT PROCEDURES/SPECIAL SERVICES FOR PHYSICAL HANDICAPS AND/OR HEALTH CONDITIONS.
03	HOW TO PROVIDE A SAFE, COMFORTABLE ENVIRONMENT.
04	HOW TO DEAL WITH EMERGENCY SITUATIONS (FIRE, SEIZURES, ETC.)
05	MECHANICAL/ELECTRONIC DEVICES AVAILABLE FOR THESE STUDENTS.
06	HOW TO DIAGNOSE OR IDENTIFY HANDICAPPED STUDENTS' INDIVIDUAL ACADEMIC STRENGTHS AND WEAKNESSES.
07	APPROPRIATE INSTRUCTIONAL TECHNIQUES.
08	APPROPRIATE INSTRUCTIONAL MATERIALS.
09	APPROPRIATE PROGRAMS/CURRICULUM (E.G. INDIVIDUAL, REMEDIAL).
10	APPROPRIATE EVALUATION METHODS.
11	APPROPRIATE PHYSICAL ACTIVITIES.
12	HOW TO DIAGNOSE OR IDENTIFY HANDICAPPED STUDENTS' INDIVIDUAL ACADEMIC STRENGTHS AND WEAKNESSES.
13	HOW TO DEAL WITH SOCIAL/EMOTIONAL PROBLEMS.
14	APPROPRIATE COUNSELLING METHODS FOR STUDENTS AND/OR THEIR PARENTS.
15	WAYS OF IDENTIFYING AND DEALING WITH NEGATIVE ATTITUDES TOWARD HANDICAPPED STUDENTS WITHIN YOURSELF.
16	WAYS OF DEALING WITH NEGATIVE ATTITUDES TOWARD HANDICAPPED STUDENTS WITHIN OTHER STUDENTS.
17	EXPERIENCE OR ACTUAL CONTACT WITH PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED STUDENTS.
	OTHER (DESCRIBE).

APPENDIX K

THE PRINCIPAL INTERVIEW SCHEDULE

THE PHYSICALLY HANDICAPPED

AND HEALTH IMPAIRED CHILDREN:

DO THEY PROSPER IN REGULAR

TORONTO ELEMENTARY SCHOOLS?

PRINCIPAL INTERVIEW SCHEDULE

________ 6

1 2 __ __ 10

Board: ____________________

School: ____________________

Principal: ____________________

The purpose of this study is to determine whether the academic, social, emotional, physical and medical needs of physically handicapped and health impaired children are being met in regular Toronto schools.

This interview schedule is composed of two parts:
Part A contains questions related to the handicapped and health impaired student(s) in your school whose name(s) is (are) given below.
Part B relates more generally to all physically handicapped and health impaired students.

A ____________________
B ____________________
C ____________________
D ____________________
E ____________________
F ____________________
G ____________________
H ____________________
I ____________________
J ____________________
K ____________________
L ____________________
M ____________________
N ____________________
O ____________________

1 (a) HOW MANY OF THESE STUDENTS HAVE ATTENDED YOUR SCHOOL IN REGULAR CLASSES OR SPECIAL EDUCATION* CLASSES SINCE THEY BEGAN THEIR EDUCATION?

______ (__ __) 12

(b) BY SUBTRACTION, THEN, ______ (number) STUDENTS HAVE TRANSFERRED INTO REGULAR CLASSES OR SPECIAL EDUCATION* CLASSES IN YOUR SCHOOL. (__ __)

(c) HOW MANY OF THE TRANSFERRED STUDENTS CAME FROM EACH OF THE FOLLOWING? (YOU MAY NEED TO REFER TO OFFICE RECORDS TO GET THIS INFORMATION.)

** Special Program (Health) .... (__ __)16
** Special Program (Deaf) .... (__ __)
** Special Program (Hearing) .... (__ __)
Special Program (Home Instruction) .... (__ __)
Special Program (Hospital & Institutional) .... (__ __)
** Special Program (Language) .... (__ __)
** Special Program (Orthopaedic) .... (__ __)
A segregated school for physically handicapped (e.g. Sunny View) .... (__ __)30
Crippled Children Centre School .... (__ __)
Another regular Toronto school class .... (__ __)
Another regular school class outside Toronto .... (__ __)
An educational setting outside Canada .... (__ __)
Other (Describe below) .... (__ __)
Don't Know .... (__ __)42

(d) ELABORATE ON YOUR ANSWER TO 1 (c).

______ (__ __)
______ (__ __)
______ (__ __)
______ (__ __)
______ (__ __)52

---

* Special Education Classes refer to:

Self-Contained Special Programs (Behavioural; Learning Disabilities; Primary, Junior, Senior; and Reading)

Withdrawal Special Programs (Behavioural; Gifted and Enrichment; Learning Centre; Learning Disabilities; Primary, Junior, Senior; Reading Clinic; Hearing; and Speech)

** Metro-Wide Programs

2 (a) HOW MANY OF THESE TRANSFERRED STUDENTS WERE ADMITTED WITH EACH OF THE FOLLOWING PROCEDURES?

Review of Records (e.g. O.S.R.'s) .... (__ __)54
Consultation with parent(s)/guardian .... (__ __)
Pre-admission visit for student/family .... (__ __)
Review of school building/facilities .... (__ __)
Compilation of medical/social history by Nurse .... (__ __)
Consideration by Special Education Placement and Review Committee .... (__ __)
Review by Co-ordinator of Physically Handicapped Programs .... (__ __)
Assessment by Psycho-Ed Consultant .... (__ __)
Assessment by Psychiatrist .... (__ __)70
Health Assessment by Nurse/Doctor .... (__ __)
Assessment by Orthopaedic Consultant (DPH) .... (__ __)
Consideration by Guidance Counsellor .... (__ __) $\frac{8}{79}\ \frac{1}{80}$
Consideration by Special Education Consultant .... (__ __)
Consideration by Therapists .... (__ __)8
Consideration by Social Worker .... (__ __)
Consideration by Special Education Superintendent .... (__ __)
Consideration by Local Superintendent .... (__ __)
Involvement of Interpreter .... (__ __)
Consideration by sending Principal/Vice Principal .... (__ __)
Consideration by sending Teacher(s) .... (__ __)20
Consideration by Clergy .... (__ __)
Other (Describe below) .... (__ __)
No procedures used .... (__ __)
Don't Know .... (__ __)

(b) ELABORATE ON YOUR ANSWERS TO QUESTION 2(a).

______ (__ __)30
______ (__ __)
______ (__ __)
______ (__ __)
______ (__ __)
______ (__ __)40
______ (__ __)
______ (__ __)
______ (__ __)46

3 DESCRIBE ANY PROBLEMS OF WHICH YOU ARE AWARE WHICH OCCURRED DURING THE TRANSFER OF THESE STUDENTS TO REGULAR CLASSES OR SPECIAL EDUCATION* CLASSES IN YOUR SCHOOL.

____ (__ __)48
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)60
____ (__ __)
____ (__ __)
____ (__ __)

4 (a) HOW MANY OF THESE STUDENTS HAD EACH OF THE FOLLOWING CHANGES AND/OR PREPARATIONS MADE FOR THEM WHEN THEY TRANSFERRED INTO REGULAR CLASSES OR SPECIAL EDUCATION* CLASSES IN YOUR SCHOOL?

Affective preparation for principal(s) . . . . (__ __)
Cognitive preparation for principal(s) . . . . (__ __)70
Affective preparation for teacher(s) . . . . (__ __)
Cognitive preparation for teacher(s) . . . . (__ __)
In-service training for teacher(s) . . . . (__ __)
Affective preparation for regular students . . . . (__ __) 0 2 / 79 80
Cognitive preparation for regular students . . . . (__ __)8
Alteration of school building . . . . (__ __)
Hiring of educational assistants . . . . (__ __)
Reduction of class size . . . . (__ __)
Arrangement for therapist(s) . . . . (__ __)
Arrangement for increased medical services (VON, clinics, etc.) . . . . (__ __)
Addition of orthopaedic/health equipment . . . . (__ __)20
Arrangement for transportation . . . . (__ __)
Other (Describe below) . . . . (__ __)
Nothing . . . . (__ __)
Don't Know . . . . (__ __)

(b) ELABORATE ON YOUR ANSWERS TO QUESTION 4 (a).

____ (__ __)30
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)38

---

* See footnote on Page 1.

5 (a) INDICATE HOW MANY OF THE PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED STUDENTS IN YOUR SCHOOL COME TO SCHOOL BY EACH OF THE FOLLOWING MEANS:

On foot . . . . (__ __)40
Wheelchair Van . . . . (__ __)
Family Car . . . . (__ __)
T.T.C. . . . . (__ __)
School bus . . . . (__ __)
Taxi . . . . (__ __)50
Other (Describe below) . . . . (__ __)
Don't Know . . . . (__ __)

(b) ELABORATE ON YOUR ANSWERS TO QUESTION 5(a).

____ (__ __)56
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)64

(c) HOW MANY OF THESE STUDENTS COULD HAVE BETTER TRANSPORTATION ARRANGEMENT(S)?

________________ Don't Know
(Number) (99) (__ __)66

(d) FOR THOSE STUDENTS WHO COULD HAVE BETTER ARRANGEMENTS, DESCRIBE THE IMPROVEMENTS WHICH COULD BE MADE.

____ (__ __)68
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)76

0 3
79 80

6 (a) HOW MANY OF THE PHYSICALLY HANDICAPPED AND HEARING IMPAIRED STUDENTS IN YOUR SCHOOL HAVE PROGRAMS/CURRICULUMS/GROUPINGS WITH EACH OF THE FOLLOWING CHARACTERISTICS?

Individualization . . . . (__ __)8
Continuous progress . . . . (__ __)
Flexible curriculum . . . . (__ __)
Remedial instruction . . . . (__ __)
Multi-age/family grouping . . . . (__ __)
Regular monitoring of student's progress . . . . (__ __)
Alternate methods of evaluation and testing . . . . . . (__ __)20
Curriculum specialists/consultants . . . . (__ __)
Educational assistance . . . . (__ __)
Volunteers . . . . (__ __)
Special equipment (e.g. typewriter) . . . . (__ __)
Materials/activities to increase self-confidence . . . (__ __)
Materials/activities to promote social adjustment . . . (__ __)30
Materials/activities to promote emotional health . . . (__ __)
Special curriculum materials . . . . (__ __)
Support/resource personnel/experts . . . . (__ __)
Co-operation/communication between administrators and teachers to plan program . . . . (__ __)40
Sharing/communication between special education and regular teachers to plan program . . . . (__ __)
Teacher preparation time . . . . (__ __)
Other (Describe below) . . . . (__ __)

6 (b) ELABORATE ON YOUR ANSWERS TO 6 (a).

____ (__ __)
____ (__ __)
____ (__ __)50
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)60
____ (__ __)
____ (__ __)64

7 (a) IS THE PRESENCE OF THIS (THESE) STUDENT(S) IN YOUR SCHOOL A DETRIMENT TO THE EXISTING PROGRAMS/CURRICULUMS/GROUPINGS?

Yes	No	Don't Know
1	2	3

(__)66

(b) IF "NO", ELABORATE.

____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)75

(c) IF "YES" TO QUESTION 7 (a), ELABORATE.

0 4
79 80

____ (__ __)8
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)16

8 (a) ARE THE CLASSES IN YOUR SCHOOL TOO LARGE TO ACCOMMODATE THIS (THESE) STUDENT(S)?

Yes	No	Don't Know
1	2	3

(__) 17

(b) ELABORATE ON YOUR ANSWER.

____ (__ __)
____ (__ __)
____ (__ __)22

9 (a) DOES YOUR SCHOOL CONTAIN TOO MANY STUDENTS WITH SPECIAL NEEDS?

Yes	No	Don't Know
1	2	3

(__)24

(b) ELABORATE ON YOUR ANSWER.

____ (__ __)
____ (__ __)
____ (__ __)30

10 (a) DOES THE EXISTENCE OF THIS (THESE) STUDENT(S) IN YOUR SCHOOL CREATE PROBLEMS FOR YOU AS AN ADMINISTRATOR?

Yes	No	Don't Know
1	2	3

(__) 31

(b) IF "NO" TO QUESTION 10 (a), ELABORATE.

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)41

(c) IF "YES" TO QUESTION 10 (a), DESCRIBE THE PROBLEMS.

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)51

11 (a) DO YOU HAVE ENOUGH ADMINISTRATIVE TIME TO MANAGE THE REQUIREMENTS OF THIS (THESE) STUDENT(S)?

Yes	No	Don't Know
1	2	3

(__) 52

(b) ELABORATE ON YOUR ANSWER.

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)58

12 (a) DOES THE EXISTENCE OF THIS (THESE) STUDENT(S) IN YOUR SCHOOL CREATE PROBLEMS FOR THE REGULAR STUDENTS?

Yes	No	Don't Know
1	2	3

(__) 59

(b) IF "NO", ELABORATE.

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)69

(c) IF "YES", DESCRIBE THE PROBLEMS.

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)77

0 8
79 80

B

1. HOW DO YOU PERSONALLY FEEL ABOUT HAVING PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED STUDENTS IN YOUR SCHOOL?

______________________________ (__ __) 8
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 16

2 (a) HAVE YOU HAD ANY PROFESSIONAL TRAINING IN THE EDUCATION OF PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED STUDENTS?

Yes	No	Don't Know
1	2	3

(__) 17

IF "YES" TO QUESTION (a), GO TO 2 (e).

IF "NO" TO QUESTION (a), ANSWER 2 (b), (c), and (d).

(b) WOULD YOU LIKE TO HAVE SUCH TRAINING?

Yes	No	Don't Know
1	2	3

(__) 18

(c) ELABORATE ON 2 (b).

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 24

(d) IF "YES" TO 2 (b), HOW WOULD YOU LIKE TO OBTAIN SUCH TRAINING?

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 34

GO TO QUESTION 3.

2 (e) DESCRIBE THE TYPE OF TRAINING (e.g. SUMMER COURSE). GIVE THE PLACE OF TRAINING (e.g. O.I.S.E.), GIVE THE LENGTH OF TRAINING IN WEEKS. RATE THE QUALITY OF THE TRAINING (A, B, C, D, E) AND DESCRIBE THE CONTENT OF THE TRAINING BY SELECTING ALTERNATIVES FROM CARD #1.

TYPE	PLACE	NUMBER OF WEEKS	QUALITY	CONTENT

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TYPE	PLACE	NUMBER OF WEEKS	QUALITY		CONTENT	
__ __	__ __	__ __ __	__	62	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	0 6 / 79 80
__ __	__ __	__ __ __	__	14	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	
__ __	__ __	__ __ __	__	38	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	
__ __	__ __	__ __ __	__	62	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	0 7 / 79 80
__ __	__ __	__ __ __	__	14	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	
__ __	__ __	__ __ __	__	38	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	
__ __	__ __	__ __ __	__	62	__ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __/ __ __	0 8 / 79 80

3 (f) DO YOU FEEL YOU SHOULD HAVE MORE KNOWLEDGE AND UNDERSTANDING OF PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED CHILDREN?

Yes	No	Don't Know
1	2	3

(__) 7

(g) ELABORATE ON 3 (f).

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)10

(h) IF "YES" TO QUESTION 3 (f), HOW WOULD YOU LIKE TO OBTAIN IT?

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)15

3. REGARDLESS OF THE TYPE AND AMOUNT OF TRAINING YOU HAVE HAD ABOUT PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED CHILDREN, HOW WELL INFORMED AND COMPETENT DO YOU FEEL IN THIS AREA? RATE (A, B, C, D OR E) ITEMS 1 TO 16 ON CARD #1.

01

02 ___ (__)24

03 ___ (__)

04 ___ (__)

05 ___ (__)

06 ___ (__)

07 ___ (__)

08 ___ (__)30

09 ___ (__)

10 ___ (__)

11 ___ (__)

12 ___ (__)

13 ___ (__)

14 ___ (__)

15 ___ (__)

16 ___ (__)

___ (__)

4 (a) HAVE YOU HAD ANY PREVIOUS TEACHING/EDUCATIONAL EXPERIENCE WITH PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED CHILDREN?

Yes	No	Don't Know
1	2	3

(__)40

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)45

5 (a) HAVE YOU HAD ANY PERSONAL EXPERIENCE OUTSIDE OF SCHOOL WITH PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED CHILDREN AND/OR ADULTS?

Yes	No	Don't Know
1	2	3

(__)46

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)51

6. SUPPOSE AS AN ADMINISTRATOR THAT SEVERAL PHYSICALLY HANDICAPPED AND HEALTH IMPAIRED STUDENTS (MANY SEVERELY AFFLICTED) WERE TO BE INTEGRATED INTO YOUR SCHOOL. DESCRIBE THE CHANGES, IF ANY, (UNDER THE FOLLOWING HEADINGS) WHICH YOU FEEL WOULD HAVE TO BE MADE.

(a) SCHOOL BUILDING

____ (__ __)63
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

(b) SCHOOL FACILITIES

____ (__ __)73
____ (__ __)
____ (__ __) [illegible] 79 80
____ (__ __)8
____ (__ __)

(c) STAFFING (KIND OF STAFFING, NUMBERS)

____ (__ __)13
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

(d) STAFF TRAINING

____ (__ __)23
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

(e) SPECIAL SERVICES

____ (__ __)33
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

(Continued)

6 (f) PROGRAM/CURRICULUM

____ (__ __)43
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

(g) OTHER

____ (__ __)53
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

7 (a) SUPPOSE THE CHANGES YOU DESCRIBED WERE TO BE MADE IN YOUR SCHOOL, DO YOU NOW KNOW OF ANY CHILDREN WHO COULD THEN BE INTEGRATED?

Yes	No	Don't Know	
1	2	3	(__) 63

(b) IF "YES", HOW MANY?

____ (__ __)

8. OTHER COMMENTS

____ (__ __)66
____ (__ __)
____ (__ __)
____ (__ __)
____ (__ __)

9. INTERVIEWER'S COMMENTS

____ (__ __)73
____ (__ __) [illegible] 79 80
____ (__ __)8
____ (__ __)
____ (__ __)18

[illegible] 79 80

Principal Card #1

01 CHARACTERISTICS AND CAUSES OF PHYSICAL HANDICAPS AND/OR HEALTH CONDITIONS.

02 TREATMENT PROCEDURES/SPECIAL SERVICES FOR PHYSICAL HANDICAPS AND/OR HEALTH CONDITIONS.

03 HOW TO PROVIDE A SAFE, COMFORTABLE ENVIRONMENT.

04 HOW TO DEAL WITH EMERGENCY SITUATIONS (FIRE, SEIZURES, ETC.)

05 MECHANICAL/ELECTRONIC DEVICES AVAILABLE FOR THESE STUDENTS.

06 HOW TO DIAGNOSE OR IDENTIFY HANDICAPPED STUDENTS' INDIVIDUAL ACADEMIC STRENGTHS AND WEAKNESSES.

07 APPROPRIATE INSTRUCTIONAL TECHNIQUES.

08 APPROPRIATE INSTRUCTIONAL MATERIALS.

09 APPROPRIATE PROGRAMS/CURRICULUM (E.G. INDIVIDUAL, REMEDIAL).

10 APPROPRIATE EVALUATION METHODS.

11 APPROPRIATE PHYSICAL ACTIVITIES.

12 HOW TO DIAGNOSE OR IDENTIFY HANDICAPPED STUDENTS' INDIVIDUAL ACADEMIC STRENGTHS AND WEAKNESSES.

13 HOW TO DEAL WITH SOCIAL/EMOTIONAL PROBLEMS.

14 APPROPRIATE COUNSELLING METHODS FOR STUDENTS AND/OR THEIR PARENTS.

15 WAYS OF IDENTIFYING AND DEALING WITH NEGATIVE ATTITUDES TOWARD HANDICAPPED STUDENTS WITHIN YOURSELF.

16 WAYS OF DEALING WITH NEGATIVE ATTITUDES TOWARD HANDICAPPED STUDENTS WITHIN OTHER STUDENTS.

17 EXPERIENCE OR ACTUAL CONTACT WITH PHYSICALLY HANDICAPPED AND/OR HEALTH IMPAIRED STUDENTS.

OTHER (DESCRIBE).

APPENDIX L

THE PARENT INTERVIEW SCHEDULE

THE PHYSICALLY HANDICAPPED

AND HEALTH IMPAIRED CHILDREN:

DO THEY PROSPER IN REGULAR

TORONTO ELEMENTARY SCHOOLS?

PARENT INTERVIEW SCHEDULE

STUDENT'S NAME: ______________________________

__ __ __ __ __ __ 8

1 9 __ __ 10

NAME OF PERSON INTERVIEWED: ______________________________

RELATIONSHIP TO STUDENT: ______________________________ (__ __)12

NAME OF PERSON INTERVIEWED: ______________________________

RELATIONSHIP TO STUDENT: ______________________________ (__ __)14

NAME OF PERSON INTERVIEWED: ______________________________

RELATIONSHIP TO STUDENT: ______________________________ (__ __)16

The purpose of this study is to determine whether the academic, social, emotional, physical and medical needs of physically handicapped and health impaired children are being met in regular Toronto schools.

1. FIRST, WE WOULD LIKE YOU TO DESCRIBE YOUR CHILD'S HISTORY SINCE HE/SHE FIRST STARTED SOME FORM OF EDUCATION. (INCLUDE TIMES SPENT IN NONEDUCATIONAL SETTINGS.)

Age (in months)	Place and Location (school, institution, hospital, etc. in board, province, country, etc.)	Received Education (Yes = 1) (No = 2)	Level or Grade	Type of Class
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________
____ to ____	________ in ________	____	____	____________

FOR OFFICE USE ONLY

1\.
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)32
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___) 0 1
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)64 79 80
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)22
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___) 0 2
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)70 79 80
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)22
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___) 0 3
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)70 79 80
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)22
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___) 0 4
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)70 79 80
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)22
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___) 0 5
(___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___)54 79 80

2. WHICH OF THE FOLLOWING STATEMENTS BEST DESCRIBES HOW YOUR CHILD CAME TO BE ENROLLED IN THE TYPE OF CLASS HE/SHE IS IN NOW. (YOU MAY CHECK MORE THAN ONE ANSWER.)

01 Team decision of parents and school personnel.

02 Advice of school personnel; parents consented without participating.

03 Decision of parents against advice of school personnel.

04 Enrolment not different from a regular student.

05 Enrolment in regular class because Special Education class/program not available.

06 Enrolment in regular class because Special Education class/program already filled.

07 Enrolment in this class because appropriate class was too far away.

08 Enrolment in this class because special school (e.g. Sunny View) is filled.

09 Enrolment in this class because special school (e.g. Sunny View) was too far away.

10 Enrolment in regular class pending assessment or diagnosis.

11 Don't know.

12 Do not understand the question.

Other ______________________

(__ __)8
(__ __)
(__ __)

3 (a) DID YOU ENCOUNTER ANY PROBLEMS WITH ENROLLING YOUR CHILD IN THE CLASS HE/SHE IS IN NOW?

Yes	No	Don't Know	
1	2	3	(__) 13

(b) IF "YES", DESCRIBE THOSE PROBLEMS.

______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)29

4 (a) GIVEN YOUR CHILD'S PHYSICAL HANDICAP(S) AND OR HEALTH IMPAIRMENT, DO YOU CONSIDER THE PRESENT EDUCATIONAL ARRANGEMENT TO BE THE MOST SUITABLE ONE?

Yes	No	Don't Know	
1	2	3	(__) 30

(b) ELABORATE ON YOUR ANSWER.

______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)40
______________________ (__ __)
______________________ (__ __)

(c) IF "NO" TO 4 (a), WHAT KIND OF ARRANGEMENT WOULD YOU LIKE?

______________________ (__ __)
______________________ (__ __)
______________________ (__ __)50
______________________ (__ __)
______________________ (__ __)

(d) HAS YOUR CHILD'S PRESENT PLACEMENT BEEN REVIEWED DURING THIS SCHOOL YEAR?

Yes	No	Don't Know	
1	2	3	(__)55

(e) ELABORATE ON YOUR ANSWER FOR (d).

______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)
______________________ (__ __)65

5 (a) HOW DOES YOUR CHILD GO TO SCHOOL?

01 On foot
02 Wheelchair van
03 Family car
04 T.T.C.
05 School bus
06 Taxi
07 Don't Know
Other ______________________________

(__ __)67
(__ __)

(b) COULD YOUR CHILD HAVE A BETTER ARRANGEMENT FOR TRANSPORTATION TO SCHOOL?

Yes	No	Don't Know	
1	2	3	(__) 70

(c) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __) 04 7-8
______________________________ (__ __)8

6 (a) IS THE SCHOOL EASILY ACCESSIBLE TO YOUR CHILD?

Yes	No	Don't Know	
1	2	3	(__) 9

(b) IF "NO" TO 6 (a), WHAT CHANGES WOULD MAKE THE SCHOOL MORE ACCESSIBLE?

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)23

7 (a) ARE THE SCHOOL FACILITIES (e.g. TOILETS, LOCKERS) CONVENIENT TO YOUR CHILD?

Yes	No	Don't Know	
1	2	3	(__) 24

(b) IF "NO", WHAT CHANGES WOULD MAKE THE SCHOOL FACILITIES MORE CONVENIENT?

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)30
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)

8 (a) HAS YOUR CHILD EXPERIENCED ANY ACCIDENTS ASSOCIATED WITH THE PHYSICAL FACILITIES OF THE SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)39

(b) IF "YES", WHAT FACILITY(IES) CAUSED THE ACCIDENT(S)?

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)49

9 (a) DOES YOUR CHILD NEED TO TAKE MEDICATION WHILE AT SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)50

(b) IF "YES", HAVE THERE BEEN ANY PROBLEMS (e.g. DELIVERY, ADMINISTRATION) WITH THAT MEDICATION?

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)60

12 (a) WHICH OF THE FOLLOWING SPECIAL SERVICES DOES YOUR CHILD REQUIRE IN SCHOOL? FOR EACH SUCH SERVICE, INDICATE WHOM/WHAT YOU THINK SHOULD SUPPLY THE SERVICE IN AN IDEAL SITUATION (SEE CARD #1) AND WHO/WHAT ACTUALLY SUPPLIES THE SERVICE NOW.

	Needs Service (Yes = 1) (No = 2)	Ideal Supplier(s) of Service	Who/What Supplies Services Now	
Dressing	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Eating	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Toileting	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Medical Care	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Medication	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)71	0 8 79 80
Mobility	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Positioning	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Physical therapy	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Speech therapy	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Occupational therapy	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)71	0 9 79 80
Psychological counselling	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Remedial academic help	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Taping service for note taking	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Help with listening	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Help with reading	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)71	1 0 79 80
Help with writing	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)19	
Help with talking	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Repairs for orthopaedic equipment	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)	
Help for seizures/convulsions/comas ...	(__)	(__ __, __ __, __ __)	(__ __, __ __, __ __)38	

SUPPOSE YOUR CHILD IS SICK AT SCHOOL AND NEEDS TO LEAVE SCHOOL, IS THERE SOMEONE AT HOME TO TAKE CARE OF HIM/HER?

Yes	No	Don't Know	
1	2	3	(__)61

11 (a) IN CASE OF A SCHOOL EMERGENCY (e.g. FIRE), WOULD YOUR CHILD NEED SPECIAL HELP?

Yes	No	Don't Know	
1	2	3	(__)

(b) IF "YES", ELABORATE.

______________________________ (__ __)64

______________________________ (__ __)

______________________________ (__ __)

(c) IF "YES" TO 11 (a), HAS THE PRINCIPAL MADE ARRANGEMENTS FOR SUCH HELP?

Yes	No	Don't Know	
1	2	3	(__)69

0 7
79 80

13 (a) ARE YOU AWARE OF ANY PROGRAM/CURRICULUM CHANGES, PREPARATIONS AND/OR SPECIAL PROVISIONS WHICH THE SCHOOL HAS MADE FOR YOUR CHILD?

Yes	No	Don't Know	
1	2	3	(__) 7

(b) IF "YES", DESCRIBE THOSE CHANGES, PREPARATIONS AND/OR SPECIAL PROVISIONS.

____________________ (__ __)
____________________ (__ __)
____________________ (__ __)
____________________ (__ __)
____________________ (__ __)

(c) IF "NO", WOULD YOU LIKE TO SEE ANY CHANGES, PREPARATIONS AND/OR SPECIAL PROVISIONS MADE?

Yes	No	Don't Know	
1	2	3	(__) 10

(d) ELABORATE ON YOUR ANSWER FOR (c).

____________________ (__ __)
____________________ (__ __)
____________________ (__ __)
____________________ (__ __)
____________________ (__ __)

14 (a) IS THE SIZE OF YOUR CHILD'S SCHOOL CLASS TOO LARGE TO MEET HIS/HER NEEDS?

Yes	No	Don't Know	
1	2	3	(__)29

(b) ELABORATE ON YOUR ANSWER.

____________________ (__ __)
____________________ (__ __)
____________________ (__ __)

15 (a) DOES YOUR CHILD HAVE AN INDIVIDUALIZED PROGRAM AT SCHOOL (DIAGNOSIS, CURRICULUM, EVALUATION, ETC.)?

Yes	No	Don't Know	
1	2	3	(__)36

(b) IF "YES", ARE YOU SATISFIED WITH THE PROGRAM?

Yes	No	Don't Know	
1	2	3	(__)

(c) IF "NO" TO 15 (a), DOES YOUR CHILD NEED AN INDIVIDUALIZED PROGRAM?

Yes	No	Don't Know	
1	2	3	(__)38

12(b) ARE THERE OTHER SPECIAL SERVICES WHICH YOUR CHILD NEEDS BUT ARE NOT IN THE ABOVE LIST?

		Ideal Supplier(s) of Service	Who/What Supplies Services Now	
__________	(__ __)	(__ __) (__ __) (__ __)	(__ __) (__ __) (__ __)72	1 1 79 80
__________	(__ __)	(__ __) (__ __) (__ __)	(__ __) (__ __) (__ __)20	
__________	(__ __)	(__ __) (__ __) (__ __)	(__ __) (__ __) (__ __)	
__________	(__ __)	(__ __) (__ __) (__ __)	(__ __) (__ __) (__ __)	
__________	(__ __)	(__ __) (__ __) (__ __)	(__ __) (__ __) (__ __)62	1 2 79 80

16 (a) IS YOUR CHILD RECEIVING REMEDIAL INSTRUCTION?

Yes	No	Don't Know	
1	2	3	(__)39

(b) IF "YES", ARE YOU SATISFIED WITH THE REMEDIAL INSTRUCTION?

Yes	No	Don't Know	
1	2	3	(__)

(c) IF "NO" TO 16 (a), WOULD YOU LIKE YOUR CHILD TO RECEIVE REMEDIAL INSTRUCTION?

Yes	No	Don't Know	
1	2	3	(__)

17 (a) HAS YOUR CHILD BEEN ASSESSED OR DIAGNOSED BY SCHOOL PROFESSIONALS (e.g. TEACHERS, PSYCHOLOGISTS, SOCIAL WORKERS)?

Yes	No	Don't Know	
1	2	3	(__)

(b) IF "YES", WERE YOU SATISFIED WITH THE METHODS?

Yes	No	Don't Know	
1	2	3	(__)43

(c) ELABORATE ON YOUR ANSWER TO 17 (b).

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)49

________________________________ (__ __)

________________________________ (__ __)53

(d) AGAIN, IF "YES", WERE YOU SATISFIED WITH THE RESULTS?

Yes	No	Don't Know	
1	2	3	(__)54

(e) ELABORATE ON YOUR ANSWER TO 17 (d).

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

(f) IF "NO" TO 17 (a), WOULD YOU LIKE TO HAVE YOUR CHILD ASSESSED OR DIAGNOSED BY SCHOOL PROFESSIONALS?

Yes	No	Don't Know	
1	2	3	(__)65

---

18 (a) IS YOUR CHILD RECEIVING SUPPORT/HELP FROM DOCTORS, PSYCHOLOGISTS, THERAPISTS, ETC. WHILE IN SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)66

(b) IF "YES", ARE YOU SATISFIED WITH THE SUPPORT/HELP?

Yes	No	Don't Know	
1	2	3	(__)

(c) IF "YES" TO 18 (a), DESCRIBE THE SUPPORT/HELP.

________________________________ (__ __)68

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

(d) IF "NO" TO 18 (a), DOES YOUR CHILD NEED SUCH SUPPORT/HELP?

Yes	No	Don't Know	
1	2	3	(__) 1 2 / 79 80

(e) ELABORATE ON YOUR ANSWER TO 18 (d).

________________________________ (__ __)8

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

19 (a) IN GENERAL, DO YOU FEEL THAT THE SCHOOL PRINCIPAL AND TEACHERS ARE PROFESSIONALLY PREPARED AND COMPETENT TO MEET YOUR CHILD'S NEEDS?

Yes	No	Don't Know	
1	2	3	(__)18

(b) ELABORATE ON YOUR ANSWER TO 19 (a).

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)

________________________________ (__ __)28

20 (a) IS YOUR CHILD RECEIVING THE HELP OF CONSULTANTS AND/OR CURRICULUM SPECIALISTS IN THE SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)28

(b) IF "YES", ARE YOU SATISFIED WITH THE HELP?

Yes	No	Don't Know	
1	2	3	(__)

(c) IF "NO", TO 20 (a), DOES YOUR CHILD NEED SUCH HELP?

Yes	No	Don't Know	
1	2	3	(__)30

(d) ELABORATE ON YOUR ANSWER TO 20 (a).

(__ __)
(__ __)
(__ __)
(__ __)
(__ __)40

21 (a) ARE YOU SATISFIED WITH THE SCHOOL'S EVALUATION AND REPORTING PROCEDURES?

Yes	No	Don't Know	
1	2	3	(__)

(b) ELABORATE ON YOUR ANSWER TO 21 (a).

(__ __)
(__ __)45
(__ __)
(__ __)
(__ __)

22 (a) ARE YOU SATISFIED WITH THE PHYSICAL EDUCATION PROGRAM YOUR CHILD IS RECEIVING IN SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)52

(b) ELABORATE ON YOUR ANSWER TO 22 (a).

(__ __)
(__ __)
(__ __)
(__ __)
(__ __)62

23 (a) ARE YOU SATISFIED WITH YOUR CHILD'S PARTICIPATION IN SUCH SCHOOL ACTIVITIES AS MUSIC, ART AND FIELD TRIPS?

Yes	No	Don't Know	
1	2	3	(__)63

(b) ELABORATE ON YOUR ANSWER TO 23 (a).

(__ __)
(__ __)
(__ __)69
(__ __)
(__ __)

24. DO YOU FEEL YOU HAVE ENOUGH SAY IN PLANNING AND REVIEWING YOUR CHILD'S SCHOOL PROGRAM?

Yes	No	Don't Know	
1	2	3	(__)74

25. DO YOU FEEL FREE TO CHALLENGE DECISIONS WHICH SCHOOL PERSONNEL MAKE RELATED TO YOUR CHILD?

Yes	No	Don't Know	
1	2	3	(__)

26. DO YOU CONSIDER THE SCHOOL PERSONNEL SUPPORTIVE WITH RESPECT TO YOUR CHILD?

Yes	No	Don't Know	
1	2	3	(__)76

1 4
79 80

27 (a) HOW WOULD YOU RATE YOUR CHILD'S OVERALL INTELLECTUAL POTENTIAL?

A	B	C	D	E	Don't Know	
1	2	3	4	5	6	(__) 7

(b) GIVEN YOUR CHILD'S INTELLECTUAL POTENTIAL, HOW WOULD YOU RATE HIS/HER PERFORMANCE IN MATHEMATICS THIS YEAR?

Above potential 1
Below potential 2
At potential .... 3 (__)

(c) IF ABOVE POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

______________________________ (__ __)10
______________________________ (__ __)

(d) IF BELOW POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

______________________________ (__ __)
______________________________ (__ __)

(e) IF BELOW POTENTIAL, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

______________________________ (__ __)
______________________________ (__ __)20

(f) GIVEN YOUR CHILD'S INTELLECTUAL POTENTIAL, HOW WOULD YOU RATE HIS/HER PERFORMANCE IN READING THIS YEAR?

Above potential 1
Below potential 2
At potential .... 3 (__)21

(g) IF ABOVE POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

______________________________ (__ __)
______________________________ (__ __)

(h) IF BELOW POTENTIAL, HOW DO YOU ACCOUNT FOR THIS?

______________________________ (__ __)
______________________________ (__ __)

(i) IF BELOW POTENTIAL, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

______________________________ (__ __)
______________________________ (__ __)33

28 (a) HOW WOULD YOU RATE YOUR CHILD'S SOCIAL ADJUSTMENT AT SCHOOL?

A	B	C	D	E	Don't Know	
1	2	3	4	5	6	(__) 34

(b) IF YOU RATED YOUR CHILD'S SOCIAL ADJUSTMENT AS A OR B, HOW DO YOU ACCOUNT FOR IT?

______________________________ (__ __)
______________________________ (__ __)

(c) IF YOU RATED YOUR CHILD'S SOCIAL ADJUSTMENT AS D OR E, HOW DO YOU ACCOUNT FOR IT?

______________________________ (__ __)40
______________________________ (__ __)

(d) IF D OR E, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

______________________________ (__ __)
______________________________ (__ __)

29 (a) HOW WOULD YOU RATE YOUR CHILD'S EMOTIONAL ADJUSTMENT IN SCHOOL?

A	B	C	D	E	Don't Know	
1	2	3	4	5	6	(__) 47

(b) IF YOU RATED YOUR CHILD'S EMOTIONAL ADJUSTMENT AS A OR B, HOW DO YOU ACCOUNT FOR IT?

______________________________ (__ __)
______________________________ (__ __)

(c) IF YOU RATED YOUR CHILD'S EMOTIONAL ADJUSTMENT AS D OR E, HOW DO YOU ACCOUNT FOR IT?

______________________________ (__ __)
______________________________ (__ __)55

(d) IF D OR E, WHAT COULD BE DONE TO IMPROVE THE SITUATION?

______________________________ (__ __)
______________________________ (__ __)

30 (a) IS YOUR CHILD RELUCTANT TO GO TO SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)60

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)
______________________________ (__ __)70
____

1 8
79 80

31 THE FOLLOWING IS A LIST OF SECONDARY BENEFITS WHICH MOST PARENTS LIKE TO SEE THEIR CHILDREN GET FROM A SCHOOL. INDICATE WHETHER YOUR CHILD IS RECEIVING THESE BENEFITS IN HIS/HER SCHOOL.

	Yes	No	Don't Know	
Sense of independence	1	2	3	(__) 17
Feeling of security	1	2	3	(__)
Contact with many teachers	1	2	3	(__)
Participation in extra-curricular activities	1	2	3	(__)
Expanded horizons	1	2	3	(__)
Arousal of interests	1	2	3	(__)
Satisfaction of curiosity	1	2	3	(__)
Happiness	1	2	3	(__)
Sense of usefulness	1	2	3	(__)
Contact with many students	1	2	3	(__)
Sense of accomplishment	1	2	3	(__)
Wide variety of learning experiences	1	2	3	(__)
Wide variety of subject matter	1	2	3	(__)
High educational standards	1	2	3	(__)
No stigmatization	1	2	3	(__)
Sense of freedom	1	2	3	(__)
Assumption of responsibilities	1	2	3	(__) 33

32 (a) HAVE YOU BEEN ENCOURAGED TO VISIT THE SCHOOL?

Yes	No	Don't Know	
1	2	3	(__)

(b) HOW MANY TIMES HAVE YOU VISITED THE SCHOOL IN THIS ACADEMIC YEAR? ______________ (__ __)

33 (a) ARE SCHOOL PERSONNEL HELPING YOU MAKE LONG TERM PLANS FOR YOUR CHILD'S SECONDARY EDUCATION?

Yes	No	Don't Know	
1	2	3	(__) 37

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __) 47

34 (a) ARE SCHOOL PERSONNEL HELPING YOU MAKE LONG TERM PLANS FOR YOUR CHILD'S POST SECONDARY EDUCATION?

Yes	No	Don't Know	
1	2	3	(__) 48

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

35 (a) ARE SCHOOL PERSONNEL HELPING YOU MAKE LONG TERM PLANS FOR YOUR CHILD'S VOCATIONAL/OCCUPATIONAL TRAINING?

Yes	No	Don't Know	
1	2	3	(__) 49

(b) ELABORATE ON YOUR ANSWER.

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __)

______________________________ (__ __) 59

THE FOLLOWING QUESTIONS WILL HELP TO DESCRIBE YOUR CHILD'S SOCIAL BACKGROUND.

36 (a) WAS YOUR CHILD BORN IN CANADA?

Yes	No	Don't Know	
1	2	3	(__) 40

(b) IF "YES", WHAT PROVINCE? ____________________ (__ __)

(c) IF "NO" TO 36 (a), WHAT COUNTRY? ____________________ (__ __ __)

(d) IF "NO" TO 36 (a), WHAT YEAR DID HE SHE ARRIVE IN CANADA?

____________________ (__ __)

37 (a) WHAT LANGUAGE(S) DID YOUR CHILD LEARN TO SPEAK FIRST?

____________________ (__ __ __) 70

____________________ (__ __ __)

____________________ (__ __ __) 1 6 / 79 80

(b) WHAT OTHER LANGUAGE(S) DOES YOUR CHILD SPEAK FLUENTLY?

____________________ (__ __ __) 9

____________________ (__ __ __)

____________________ (__ __ __)

38 WITH WHICH ADULT(S) DOES YOUR CHILD LIVE?

____________________ (__ __) 17

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

39 (a) HOW MANY OLDER SIBLINGS DOES YOUR CHILD HAVE? __________ (__ __)

(b) HOW MANY YOUNGER SIBLINGS DOES YOUR CHILD HAVE? __________ (__ __)

40 WHAT IS (ARE) THE OCCUPATION(S) OF THE PERSON(S) WHO SUPPORT(S) THE CHILD? (THIS QUESTION IS OPTIONAL.)

____________________ (__ __) 31

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

41 OTHER COMMENTS

____________________ (__ __) 41

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __) 49

42 INTERVIEWER'S COMMENTS.

____________________ (__ __) 51

____________________ (__ __)

____________________ (__ __)

____________________ (__ __)

____________________ (__ __) 59

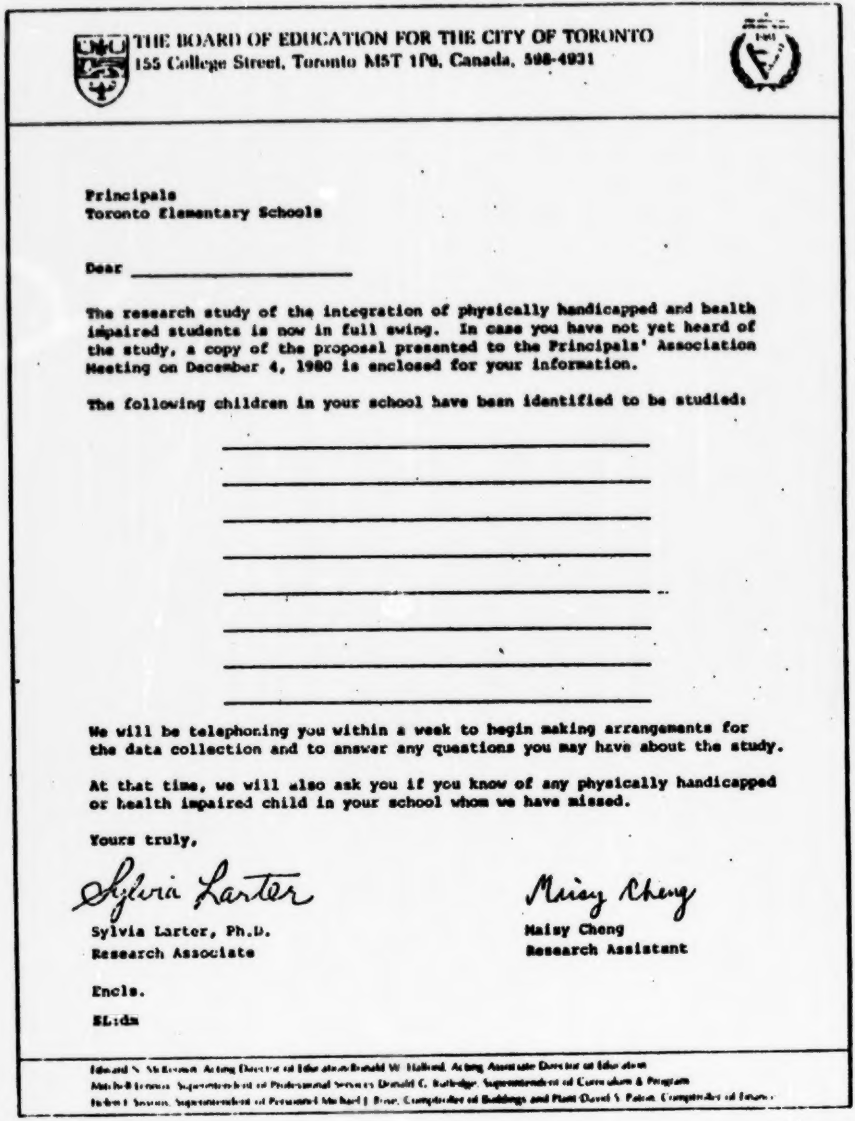
1 7 / 79 80

Parent Card #1

01	PRINCIPAL
02	VICE PRINCIPAL
03	GUIDANCE COUNSELLOR
04	REGULAR TEACHER
05	SPECIAL EDUCATION TEACHER
06	TEACHER WITH SPECIAL TRAINING
07	CRISIS TEACHER (SPECIAL TRAINING)
08	NURSE
09	DOCTOR
10	THERAPIST
11	PSYCHOLOGIST
12	CONSULTANT
13	ITINERANT/RESOURCE TEACHER
14	SOCIAL WORKER
15	CLERGY
16	EDUCATIONAL ASSISTANT
17	VOLUNTEER WORKER
18	PARENT
19	SIBLING
20	STUDENT'S PEERS
21	SCHOOL SECRETARY
22	SCHOOL CARETAKER
23	MECHANICAL DEVICE
24	ELECTRONIC DEVICE
25	SELF
26	NO-ONE

APPENDIX M

NOTICES SENT TO PRINCIPALS



THE BOARD OF EDUCATION FOR THE CITY OF TORONTO
155 College Street, Toronto M5T 1P6, Canada, 598-4931

Principals
Toronto Elementary Schools

Dear ______________________

The research study of the integration of physically handicapped and health impaired students is now in full swing. In case you have not yet heard of the study, a copy of the proposal presented to the Principals' Association Meeting on December 4, 1980 is enclosed for your information.

The following children in your school have been identified to be studied:

____

____

____

____

____

____

____

____

We will be telephoning you within a week to begin making arrangements for the data collection and to answer any questions you may have about the study.

At that time, we will also ask you if you know of any physically handicapped or health impaired child in your school whom we have missed.

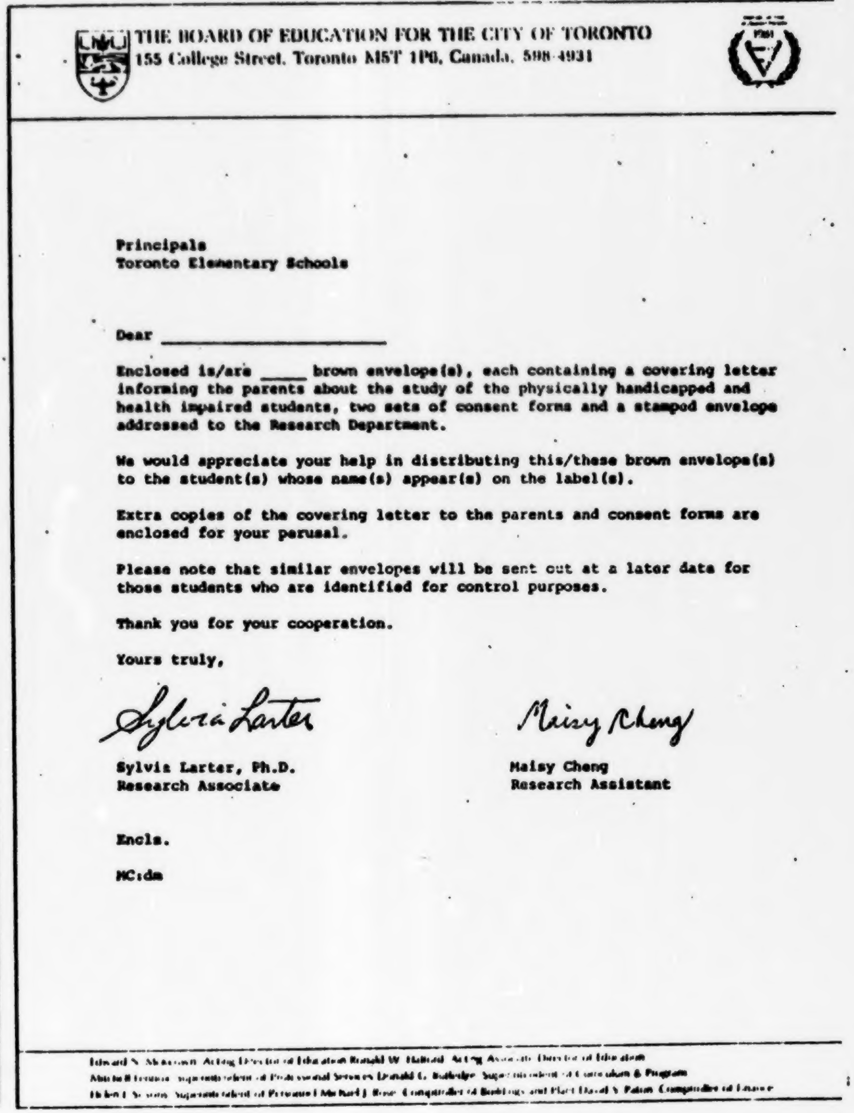
Yours truly,

Sylvia Larter
Sylvia Larter, Ph.D.
Research Associate

Maisy Cheng
Maisy Cheng
Research Assistant

Encls.

SL:dm



THE BOARD OF EDUCATION FOR THE CITY OF TORONTO
155 College Street, Toronto M5T 1P6, Canada, 598-4931

Principals
Toronto Elementary Schools

Dear ______________________

Enclosed is/are _____ brown envelope(s), each containing a covering letter informing the parents about the study of the physically handicapped and health impaired students, two sets of consent forms and a stamped envelope addressed to the Research Department.

We would appreciate your help in distributing this/these brown envelope(s) to the student(s) whose name(s) appear(s) on the label(s).

Extra copies of the covering letter to the parents and consent forms are enclosed for your perusal.

Please note that similar envelopes will be sent out at a later date for those students who are identified for control purposes.

Thank you for your cooperation.

Yours truly,

Sylvia Larter
Sylvia Larter, Ph.D.
Research Associate

Maisy Cheng
Maisy Cheng
Research Assistant

Encls.

MC:dm

APPENDIX N

LETTERS AND CONSENT FORMS

THE BOARD OF EDUCATION FOR THE CITY OF TORONTO
155 College Street, Toronto M5T 1P6. Canada. 598-4931

January 26, 1981

Dear Parent (Guardian):

The United Nations General Assembly has proclaimed 1981 the International Year of Disabled Persons (IYDP). The main objectives of the IYDP are to promote integration of disabled people into the community, the enjoyment of the disabled of rights and opportunities which are available to other people in society and the prevention of disabling conditions.

The Toronto Board of Education, the Department of Public Health and the Ministry of Education have committed funds and resources to study the integration of disabled children in Toronto Schools.

The purpose of the study is to look at the physically handicapped and health impaired children in Toronto Elementary Schools to determine whether their academic, social, emotional, physical and medical needs are being met. If it is found that certain needs are not being met, the study will suggest improvements.

Information will be gathered using tests, attitude scales, rating scales and interview schedules to answer a wide variety of questions about the experiences of the children in classrooms and to determine the attitudes and feelings of their teachers, principals and parents.

Therefore, we are writing to request that you and your child participate in this study.

If you agree to participate, we will interview you in your home within the next four or five months at which time you will have an opportunity to express your opinions about your child's progress and/or problems in school. If you agree to participate, please sign the attached consent form #1 and write down your telephone number and address. We will then telephone you and arrange a date for the interview.

If you are willing to let your child participate, he/she will be taken out of class for three one-hour sessions during which he/she will be given achievement tests, social scales, an intellectual potential test, a self-concept scale and an interview. If you agree to letting your child participate, please sign the attached consent form #2.

All information will be kept strictly confidential; the findings of the study will be reported in summary form.

...2

Duncan Green, Director of Education Edward N. McKeown, Associate Director of Education
Michael Lennon, Superintendent of Professional Services Donald G. Rutledge, Superintendent of Curriculum & Program
Helen I. Sissons, Superintendent of Personnel Harry G. Facey, Comptroller of Buildings and Plant David S. Paton, Comptroller of Finance

Please enclose both signed consent forms in the envelope which we have provided and mail them back to us as soon as possible.

The pink forms are for your own records. Please keep them.

If you have any further questions, please contact us at the Research Department of the Toronto Board of Education (598-4931, ext. 396).

We look forward to meeting you and your child.

Yours sincerely,

Sylvia Larter

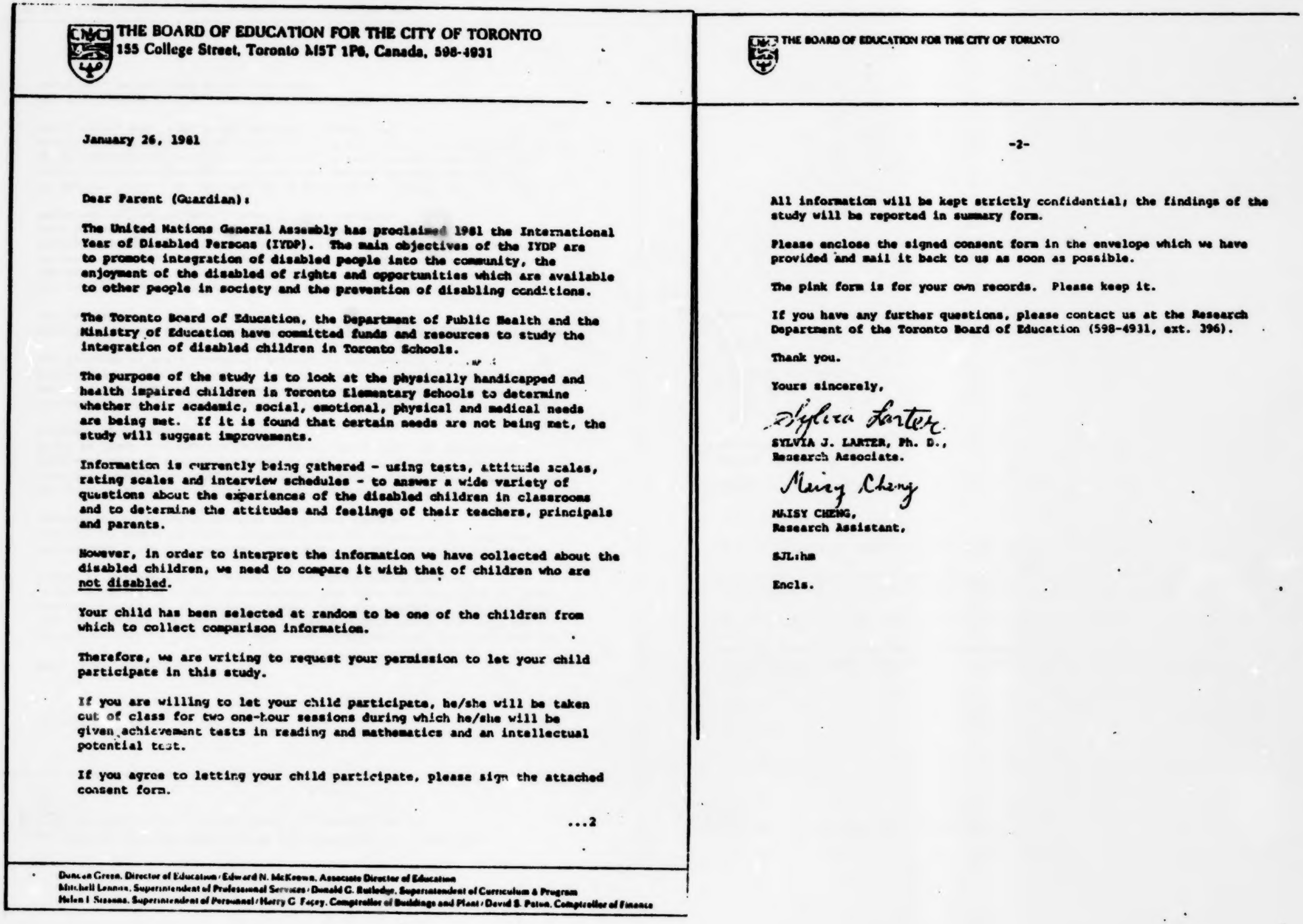
SYLVIA LARTER, Ph. D.,
Research Associate.

Maisy Cheng

MAISY CHENG,
Research Assistant.

SL:hm

Encls.



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155 College Street, Toronto M5T 1P6, Canada, 598-4931

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The Toronto Board of Education, the Department of Public Health and the Ministry of Education have committed funds and resources to study the integration of disabled children in Toronto Schools.

The purpose of the study is to look at the physically handicapped and health impaired children in Toronto Elementary Schools to determine whether their academic, social, emotional, physical and medical needs are being met. If it is found that certain needs are not being met, the study will suggest improvements.

Information is currently being gathered - using tests, attitude scales, rating scales and interview schedules - to answer a wide variety of questions about the experiences of the disabled children in classrooms and to determine the attitudes and feelings of their teachers, principals and parents.

However, in order to interpret the information we have collected about the disabled children, we need to compare it with that of children who are not disabled.

Your child has been selected at random to be one of the children from which to collect comparison information.

Therefore, we are writing to request your permission to let your child participate in this study.

If you are willing to let your child participate, he/she will be taken out of class for two one-hour sessions during which he/she will be given achievement tests in reading and mathematics and an intellectual potential test.

If you agree to letting your child participate, please sign the attached consent form.

...2

Duncan Green, Director of Education / Edward N. McKeown, Associate Director of Education
Mitchell Lennox, Superintendent of Professional Services / Donald G. Rutledge, Superintendent of Curriculum & Program
Helen I. Sissons, Superintendent of Personnel / Harry C. Facey, Comptroller of Buildings and Plant / David S. Paton, Comptroller of Finance

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-2-

All information will be kept strictly confidential; the findings of the study will be reported in summary form.

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The pink form is for your own records. Please keep it.

If you have any further questions, please contact us at the Research Department of the Toronto Board of Education (598-4931, ext. 396).

Thank you.

Yours sincerely,

Sylvia Larter

SYLVIA J. LARTER, Ph. D.,
Research Associate.

Maisy Cheng

MAISY CHENG,
Research Assistant.

SJL:hm

Encls.

THE BOARD OF EDUCATION FOR THE CITY OF TORONTO
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Your child has been selected at random to be one of the children from which to collect comparison information.

Therefore, we are writing to request your permission to let your child participate in this study.

If you are willing to let your child participate, he/she will be taken out of class for one hour during which he/she will be given a self-concept scale and a social scale.

If you agree to letting your child participate, please sign the attached consent form.

...2

Duncan Green, Director of Education · Edward N. McKeown, Associate Director of Education
Mitchell Lennox, Superintendent of Professional Services · Donald G. Rutledge, Superintendent of Curriculum & Program
Helen I. Sissons, Superintendent of Personnel / Harry G. Facey, Comptroller of Buildings and Plant / David S. Paton, Comptroller of Finance

-2-

All information will be kept strictly confidential; the findings of the study will be reported in summary form.

Please enclose the signed consent form in the envelope which we have provided and mail it back to us as soon as possible.

The pink form is for your own records. Please keep it.

If you have any further questions, please contact us at the Research Department of the Toronto Board of Education (598-4931, ext. 396).

Thank you.

Yours sincerely,

Sylvia Larter

SYLVIA J. LARTER, Ph. D.,
ResearchAssociate.

Maisy Cheng

MAISY CHENG,
Research Assistant.

SJL:hm

Encls.

CONSENT FORM #1

I hereby agree to participate in the research study on disabled and health impaired school children which is being conducted by the Toronto Board of Education.

My telephone number is

____

My address is

____
____
____

Check when you would like to be interviewed:

weekday afternoon ___
weekday evening ___
Saturday afternoon ___

Signature______________________________
(Parent or Legal Guardian)

Date______________________________

I do not wish to participate.

Signature______________________________
(Parent or Legal Guardian)

Date______________________________

CONSENT FORM #2

I hereby agree to let ______________________________ (child's name) in ______________________________ (school's name) participate in the research study on disabled and health impaired school children which is being conducted by the Toronto Board of Education.

I understand that all information will be kept strictly confidential.

Signature______________________________
(Parent or Legal Guardian)

Date______________________________

I do not want ______________________________ (child's name) in ______________________________ (school's name) to participate.

Signature______________________________
(Parent or Legal Guardian)

Date______________________________

CONSENT FORM

I hereby agree to let ______________________________ (child's name) in ______________________________ (school's name) participate in the research study on disabled and health impaired school children which is being conducted by the Toronto Board of Education.

I understand that all information will be kept strictly confidential and will be used for comparison purposes only.

Signature______________________________
(Parent or Legal Guardian)

Date______________________________

I do not want ______________________________ (child's name) in ______________________________ (school's name) to participate.

Signature______________________________
(Parent or Legal Guardian)

Date______________________________